

# **GLOBAL COMPANIES LLC FACILITY RESPONSE PLAN**

## **PREFACE**

In reference to Section 311(J) of the Federal Water Pollution Control Act (FWPCA), as amended by Section 4202 of the Oil Pollution Act of 1990, this Manual will serve as the response plan for the Global Companies LLC facility described herein.

This Manual and attached documents have been compiled in reference to the United States Coast Guard's Final Rule and is applicable to 33 CFR 154.1015(b), 33 CFR 154.1035, 33 CFR 154.1026, the Environmental Protection Agency's Final Rule 40 CFR Parts 9 and 112 dated July, 1994 concerning facilities to be in compliance with Section 4202 of the Oil Pollution Act of 1990.

A cross reference index to the guidelines issued for the facility's compliance with the appropriate USCG and EPA documents mentioned above are included as part of this Manual.

This Manual and attached documents incorporate new information and existing documents that have been updated to reflect the guidelines set forth by the United States Coast Guard (if and where applicable) and the Environmental Protection Agency pertaining to Marine and Non-Marine Transportation-Related Facilities and related FRP guidelines.

In addition to FRP Plan requirements, this Plan covers requirements for various State and Federal Regulations as noted below:

- EPA's Oil Pollution Prevention Regulation - SPCC (40 CFR 112.7(d))
- Fire Prevention Plan 29 CFR 1910.38
- EPA's RCRA Contingency Plan 40 CFR 265.52
- NYSDEC SPDES Best Management Practices Plan
- NYSDEC Spill Prevention and Containment Plan 610.4(a)(4))
- NYSDEC Groundwater Contingency Plan

A cross-reference index to the guidelines issued for the facility's compliance with the appropriate EPA and State requirements mentioned above are included as part of this Manual and begin on page ix.

**PLAN DISTRIBUTION**  
**FACILITY: GLOBAL NEWBURGH SOUTH TERMINAL**

<b>Plan Number</b>	<b>Plan Holder's Name</b>	<b>Job Title</b>	<b>Facility/ Organization/Location</b>
CAR-1	TY Kropp	Terminal Manager	Global Cargo Terminal 1184 River Road New Windsor, NY 12553
CAR-2	Ronald Kenny	Operations Manager	Global Companies LLC 11 Broadway Chelsea, MA 02150
CAR-3	Tom Keefe	Director, EHS Operations	Global Companies LLC 800 South Street Waltham, MA 02454
CAR-4	Arlene Anderson	FRP Coordinator	EPA Region II (Response & Prevention Branch) 2890 Woodbridge Avenue MS-211, Bldg. 209 Edison, NJ 08837
CAR-5	Lt Tiffany Johnson	USCG Contact	USCG MSO – Shoreside Compliance Branch (SSO) 212 Coast Guard Drive Staten Island, NY 10305
CAR-6	Orange County - Local Emergency Planning Commission	Chairperson	LEPC c/o Dept of Emergency Services Center 22 Wells Farm Road Goshen NY 10924
CAR-7	State Emergency Response Commission	Chairperson	SERC New York State Emergency Management Office 1220 Washington Avenue, Building 22, Suite 101 Albany, NY 12226-2251
CAR-8	Dan Bendell	MOSF Contact	NYDEC Region 3 21 South Putt Corners Road New Paltz, NY 12561
CAR-9*	Chief William Hinspeter	New Windsor Fire Department	New Windsor Fire Department 275 Walsh Avenue New Windsor, NY 12553
CAR-10*	Chief Michael Vatter	Fire Chief	Newburgh Fire Department 22 Grand Street Newburgh, NY 12550
CAR-11*	Chief Michael Biasotti	New Windsor Police Department	555 Union Ave New Windsor, NY 12553
CAR-12*	Ty Kropp ( <b>ERAP only for dock</b> )	Terminal Manager	
CAR-13*	Ty Kropp ( <b>ERAP only for terminal operators</b> )	Terminal Manager	
CAR-14*	Director of Emergency Medicine	Director of Emergency Medicine	St Lukes Cornwall Hospital 70 Dubios St New Windsor, NY 12250

Each individual/position/organization identified above has either received a copy of the facility's complete Facility Response Plan (the Emergency Response Action Plan (ERAP) notebook and the Facility Response Plan Manual) or only a copy of the facility's ERAP. Those receiving only the ERAP are indicated by an asterisk (\*) next to the Plan Number.

## RECORD OF PLAN CHANGES

FACILITY: GLOBAL NEWBURGH SOUTH TERMINAL

Change Number	Date of Change	Entered (please initial)	Reason or Section Changed

Changes to the Plan may be either site-specific or for a number of facilities and will be generated by the FRP Coordinator. All site-specific Plan changes made by the facility will be incorporated in Plan updates. When changes have the potential to materially affect the potential for discharge, these changes will be made and submitted to the appropriate regulatory authorities within 60 days of the change.

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- 7.2 TANK AND SURFACE IMPOUNDMENT INSPECTION
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FRP Final Rule 40 CFR Parts 9 and 112**

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1.7	Plan Implementation	7.0-7.1.9	6.0
1.7.1	Resources for Small, Medium, and WCD (1) Emergency plans for spill response; (2) Additional response training; (3) Additional contracted help; (4) Access to additional response equipment/experts (5) Ability to implement the plan including response training and practice drills.	7.1.1 – 7.1.4  4.0 5.0	4.1; 2.0; 3.6; 2.6.1 8.1 Appendix E Appendix E 4 8.1
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**FRP USCG 33 CFR 154.1030 (b) GENERAL CROSS REFERENCE**

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<b>33 CFR 154.1026      Qualified individual and alternate qualified individual</b>		<b>ERAP SECTION</b>	<b>FRP SECTION</b>
(a)	Identification of QI and alternate	1.0	
(b)	Requirements of QI and alternate		2.6.1
(c)	Document designating QI and alternate have authority to 1)activate and engage OSRO, 2)act as liaison with FOSC; 3) obligate funds to carry out response activity		2.6.1 (document on file at plant. Available upon request)
<b>33 CFR 154.1030 (b)      General Response Plan Contents</b>		<b>ERAP SECTION</b>	<b>FRP SECTION</b>
(1)	Introduction and Plan Content	-	Plan Overview/Table of Contents
(2)	Emergency Response Action Plan	Separate binder	-
(2)(i)	Notification Procedures	2.0	-
(2)(ii)	Facility Spill Mitigation Procedures	4.0/5.0/7.1.2	4.0/Appendix F
(2)(iii)	Facility's Response Activities	5.0/7.0	Appendix F
(2)(iv)	Sensitive Areas	8.0	3.6
(2)(v)	Disposal Plan	7.1.5/7.3	Appendix C
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(4)	Spill Scenarios	-	4.0
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(5)(ii)	Drill Procedures	-	8.2/Appendix I
(6)	Plan Review and Update Procedures	-	Plan Overview
(7)	Appendices	-	Appendix A - L
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(7)(ii)	List of Contacts	2.0	-
(7)(iii)	Equipment Lists and Records	4.0/5.0	Appendix E
(7)(iv)	Communications Plan	4.0	11.0
(7)(v)	Site-Specific Safety and Health Plan	-	12.0/Appendix D
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**FRP USCG 33 CFR 154.1035 GENERAL CROSS REFERENCE**

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**33 CFR.1035**

**Specific requirements for facilities that could be expected to cause significant and substantial harm to the environment.**

		<b>ERAP SECTION</b>	<b>FRP SECTION</b>
<b>(a) Introduction and Plan Content</b>			
(1)	Facility's name, address, telephone, etc.	1.0	-
(2)	Facility's location	1.0	-
(3)	Procedures for contacting owner/operator on a 24 hour basis	1.0	-
(4)	Table of contents	Table of Contents	Table of Contents
(5)	Cross reference	-	Cross Reference Index (between ERAP and FRP)
(6)	Record of changes	-	Record of Changes(between ERAP and FRP)
<b>(b) Emergency Response Action Plan</b>			
(1)	Notification procedures	2.0	-
(1)(i)	List of persons to be notified of a discharge	2.0/4.0	-
(1)(i)(A)	Facility response personnel, spill management team, OSRO and QI	1.0/2.0/4.0	Appendix E
(1)(i)(B)	Federal, State or Local Agencies	2.0	-
(1)(ii)	Notification form	3.0	Appendix A
(2)	Facility's spill mitigation procedures	7.1-7.9	-
(2)(i)	Volumes involved in the:		
(2)(i)(A)	Average Most Probable Discharge (AMPD)	-	4.1/4.2
(2)(i)(B)	Maximum Most Probable Discharge (MMPD)	-	4.1/4.3
(2)(i)(C)	WCD from MTR facility	-	4.1/4.4/Appendix F
(2)(i)(D)	WCD from non-transportation related facility	-	4.1/4.4
(2)(ii)	Procedures for facility personnel to mitigate or prevent any discharge	-	5.0/7.0/8.0/10.0/Appendix H/I/K
(2)(ii)(A)	Failure of manifold	7.1.2	-
(2)(ii)(B)	Tank overfill	7.1.2	-
(2)(ii)(C)	Tank failure	7.1.2	-
(2)(ii)(D)	Piping rupture	7.1.2	-
(2)(ii)(E)	Piping leak	7.1.2	-
(2)(ii)(F)	Explosion or fire	7.1.2	-
(2)(ii)(G)	Equipment failure	7.1.2	-
	Mitigation procedures for operational activity discharges	7.1-7.3	11.0/12.0
(2)(iii)	Listing of facility personnel and equipment to respond to an AMPD	4.0/5.0	4.2/Appendix E

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<b>33 CFR.1035 (b) (continued)</b>		<b>ERAP SECTION</b>	<b>FRP SECTION</b>
<b>(b) Emergency Response Action Plan</b>			
(3)	Facilities response activities	7.0	-
(3)(i)	Personnel's responsibilities while awaiting the Qualified Individual	7.1	-
(3)(ii)	Qualified Individual's responsibilities and authority	-	2.6.1
(3)(iii)	Facility/corporate organizational structure	4.0	2.6.2-2.6.3
(3)(iii)(A)	Command and control	"	
(3)(iii)(B)	Public Information	"	
(3)(iii)(C)	Safety	"	
(3)(iii)(D)	Liaison with government agencies	"	
(3)(iii)(E)	Spill Operations	"	
(3)(iii)(F)	Planning	"	
(3)(iii)(G)	Logistics support	"	
(3)(iii)(H)	Finance	"	
(3)(iv)	Oil spill removal organization (OSRO)/spill management team (SMT) identification	4.0/2.0	Appendix E
(3)(iv)(A)	OSRO & SMT must be capable of responding to the following scenarios:		
(3)(iv)(A)(i)	AMPD		
(3)(iv)(A)(ii)	MMPD		
(3)(iv)(A)(iii)	WCD		
(3)(iv)(B)	Capable of providing the following response resources:		
(3)(iv)(B)(1)	Equipment and supplies to meet the requirements of 154.1045, 154.1047 or 154.1049, as appropriate	5.0	Appendix E
(3)(iv)(B)(2)	Trained personnel necessary to continue operation of equipment and staff of OSRO and SMT for first 7 days of response	4.0	Appendix E
(3)(v)	Facilities in more than one COTP zone/mobile MTR facilities	-	N/A
(3)(vi)	Information on equipment described in plan	5.0	Appendix E

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<b>33 CFR.1035 (continued)</b>			
<b>(b) Emergency Response Action Plan (continued)</b>		<b>ERAP SECTION</b>	<b>FRP SECTION</b>
(4)	Sensitive Areas		
(4)(i)	Identify areas of economic importance & environmental sensitivity	8.0	3.6; 9.0
(4)(ii)	For a WCD from the facility, plan must:		
(4)(ii)(A)	List all areas of economic importance and environmental sensitivity identified in the ACP	-	3.6; 9.0
(4)(ii)(B)	Describe all response actions to protect these areas	7.0	3.6, 4.2-4.4
(4)(ii)(C)	Map or chart showing the location of sensitive areas.	8.0	9.0
(4)(iii)	Identify appropriate equipment and required personnel to protect sensitive areas	4.0/5.0	3.6 Appendix E
(4)(iii)(A)	Identify equipment and personnel to protect all areas of economic importance and environmental sensitivity in ACP for the distance oil will likely travel	4.0	3.6 Appendix E
(4)(iii)(B)	Identify equipment and personnel to protect sensitive areas as follows:		
(4)(iii)(B)(1)	For persistent oils and non-petroleum oils discharged into non-tidal waters	N/A	N/A
(4)(iii)(B)(2)	For persistent oils and non-petroleum oils discharged into tidal waters	N/A	N/A
(4)(iii)(B)(3)	For non-persistent oils discharged into non-tidal waters, the distance from the facility reached in 24 hours at maximum current	4.0	3.6 Appendix E
(4)(iii)(B)(4)	For non-persistent oils discharged into tidal waters	N/A	N/A
(4)(iii)(B)(5)	For persistent, non-persistent, or non-petroleum oils a spill trajectory or model may be substituted for distances listed in non-tidal and tidal waters	N/A	N/A
(5)	Disposal plan	7.3	Appendix C
<b>33 CFR.1035 (c) Hazard Evaluation</b>		-	3.0
<b>33 CFR 1035 (d) Spill Scenarios</b>			4.0/4.1/4.2/4.3/4.4
<b>33 CFR 1035 (e) Training and Drills</b>			
(1)	Training procedures and programs	-	8.1/Appendix H
(2)	Drill Procedures	-	8.2/Appendix I
<b>33 CFR 1035 (f) Plan review and update Procedures to be followed for any post-discharge review</b>		-	4.5

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<b>33 CFR 1035 (g) Appendices</b>		<b>ERAP SECTION</b>	<b>FRP SECTION</b>
(1)	Physical description of facility	1.0	-
(1)(i)	Description including mooring areas, transfer locations, control stations, safety equipment & location & capacity of all piping and storage tanks	8.0 (diagrams)	-
(1)(ii)	Identify sizes, types, and number of vessels that the facility can transfer oil to or from simultaneously	1.0	-
(1)(iii)	Identification of the MTR/non-MTR separation valve	8.0 (diagrams)	-
(1)(iv)	MSDS	-	13.0
(2)(i)	Means to contact Qualified Individuals on a 24-hour basis	1.0/2.0/4.0	-
(2)(ii)	Means to contact oil spill response organizations on a 24-hour basis	4.0	Appendix E
(2)(iii)	Contacts for government agencies on a 24-hour basis	2.0	-
(3)(i)	List of facility equipment and personnel to respond to an AMPD	4.0/5.0	4.2 Appendix E
(3)(ii)	List of oil spill removal organization's equipment for an AMPD	-	4.2 Appendix E
(3)(iii)	Equipment information for oil spill removal organizations	-	Appendix E
(4)	Communications plan	-	11.0
(5)	Site-specific safety and health plan	-	12.0; Appendix D
(6)	List of acronyms and definitions	-	Appendix J

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**FRP USCG 33 CFR 154.1045 GENERAL CROSS REFERENCE**

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**33 CFR 154.1045**

**Response plan development and evaluation criteria for facilities that handle, store, or transport Group I through Group IV oils.**

		<b>ERAP SECTION</b>	<b>FRP SECTION</b>
(a)	Evaluation of response resources for the specified operating environment	4.0/5.0	4 / Appendix E
(b)	Evaluation of response resources for the specified operating environment	4.0/5.0	4 / Appendix E
(c)	Identification of response resources for an AMPD	4.0/5.0	4.2 / Appendix E
(d)	Identification of response resources for a MMPD	4.0/5.0	4.3 / Appendix E
(e)	Identification of response resources for a WCD	4.0/5.0	4.4 / Appendix E
(f)	Response equipment response times for Tiers 1-3	4.0/5.0	Appendix E
(g)	Notification procedures for mobilization of Tier 1 response resources	2.0	-
(h)	Notification procedures for mobilization of Tier 2 and Tier 3 response resources	2.0	-
(i)	Identification of dispersant suppliers	N/A	N/A
(j)	Identification of resources with fire fighting capabilities	4.0/5.0	Appendix E
(k)	Identification of resources to perform shoreline protection operations	4.0/5.0	Appendix E
(l)	Identification of oil spill removal organizations to effect a shoreline clean-up operation	4.0/5.0	Appendix E
(m)	Identification of supplies of response equipment that exceeds caps	4.0/5.0	Appendix E

**33 CFR 154.1047**

**Response plan development and evaluation criteria for Group V petroleum oils.**

(a)(1)	Procedures/strategies for responding to discharges of Group V oil	N/A	N/A
(a)(2)	Sources of equipment and supplies to respond to discharges of Group V oils	N/A	N/A
(b)	Evaluation of response resources for the specified operating environment	N/A	N/A
(c)	Identification of equipment	N/A	N/A
(d)	Deployment of equipment within 24 hours	N/A	N/A
(e)	Identification of response resources with fire fighting capabilities	N/A	N/A

**GLOBAL COMPANIES LLC  
FACILITY RESPONSE PLAN**

**FRP USCG 33 CFR 154.1050 and 154.1055 GENERAL CROSS REFERENCE**

<b><i>FACILITY RESPONSE PLAN MANUAL</i></b>
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<b>33 CFR 154.1050 Training</b>			
		<b><i>ERAP</i></b>	<b><i>FRP</i></b>
(a)	Identification of the method of training for volunteers and casual labor	-	8.1/Appendix H
(b)	Identification of record keeping procedures	-	8.1/Appendix H
(c)	Record keeping requirements for spill removal organizations	-	8.1/Appendix H
(d)	Requirements to meet 29 CFR 1910.120 for response personnel	-	8.1/Appendix H
<b>33 CFR 154.1055 Drills</b>			
		<b><i>ERAP</i></b>	<b><i>FRP</i></b>
(a)	Details on the type and frequency of drills	-	8.2/Appendix I
(b)	Drill requirements	-	8.2/Appendix I
(c)	Requirement for record keeping	-	8.2/Appendix I
(d)	Requirement for oil spill response organization record keeping	-	8.2/Appendix I

**GLOBAL COMPANIES LLC  
FACILITY RESPONSE PLAN  
NYSDEC Best Management Practices Plan (BMP)  
CROSS REFERENCE INDEX**

<b><i>NYSDEC Best Management Practices Plan (BMP)</i></b> <i>See FRP Section 14</i>		<b><i>ERAP</i></b>	<b><i>FRP</i></b>

**NYSDEC MOSF - 6 NYCRR 610.4(a)(4)  
CROSS REFERENCE INDEX**

<b><i>NEW YORK MAJOR OIL STORAGE FACILITY REQUIREMENT</i></b>		<b><i>Plan</i></b>	
<b><u>6 NYCRR</u></b>	<b><u>Requirement Description</u></b>	<b><u>Location</u></b>	
610.4(a)(4)(i)	Spill Prevention Control and Countermeasure Plan and a Facility Response Plan written according to 40 CFR part 112	FRP App K	
610.4(a)(4)(i)	Operations Manual written according to 33 CFR 151, 154, 155, 156	Dock Operators Manual Maintained at Terminal	
610.4(a)(4)(ii)	Groundwater Protection Plan	SPCC, Sec. 1.11	
610.4(a)(4)(iii)	Site plan	ERAP, Sec. 8	
610.4(a)(4)(iv)	Description of previous spills	FRP Section 3.8	
610.4(a)(4)(v)	Schedule for installation of proposed facilities / equipment	SPCC, Sec. 1.11	
610.4(a)(4)(vi)	Compliance with 6 NYCRR 613.2 - 613.9 and 614.2 - 614.14	SPCC, Sec. 1.11	

*Copies of the MOSF application and registration, along with any MOSF related documentation can be found in the MOSF file at the facility.*

**NYSDEC Best Management Practices Plan (BMP)  
CROSS REFERENCE INDEX**

<b><i>NYSDEC Best Management Practices Plan (BMP)</i></b> <i>See FRP Section 14</i>		<b><i>ERAP</i></b>	<b><i>FRP</i></b>



**GLOBAL COMPANIES LLC  
FACILITY RESPONSE PLAN  
Fire Prevention Plan 29 CFR 1910.38  
CROSS REFERENCE INDEX**

<b><i>Fire Prevention Plan 29 CFR 1910.38</i></b> <i>See FRP Section 14</i>		<b><i>ERAP</i></b>	<b><i>FRP</i></b>
1.	List of major workplace fire hazards and proper handling and storage procedures	Other Emergencies; 5.0	
2.	Job titles of personnel responsible for maintenance of equipment	4.0	
3.	Job titles of personnel responsible for control of fuel source hazards	4.0	

**EPA's RCRA Contingency Plan (40 CFR 265.52)**

This Plan meets the requirements of 40 CFR 265.52 for hazardous waste large quantity generators. Any release of hazardous waste will follow the response procedures described herein.

See the ERAP Sections 7.1.5 and 7.3 for **RCRA Subpart CC Compliance Plan**

See the ERAP Sections 7.1.5 and 7.3 for **Waste Minimization Program for Terminals**

## **PLAN OVERVIEW**

### **A. OBJECTIVES**

Except for the required notifications, this Facility Response Plan does not provide a "how to" approach. That is, it does not provide rigid step by step actions to be taken or procedures to be followed. Experience shows that each spill is different, calling for divergent responses. The objectives of this Plan are to:

- Help terminal and plant personnel prepare for spills.
- Ensure an effective, comprehensive response.
- Prevent injury or damage to Company employees, the public, and the environment.
- Define existing procedures utilized to prevent spills.
- Define alert and notification procedures to be followed when a spill or the threat of one occurs.
- Document equipment, personnel, and other resources available to assist with the spill response.
- Establish a response team, assign individuals to fill the positions on the team, and define the roles and responsibilities of team members.
- Define organizational lines of responsibility to be adhered to during a response.
- Outline response procedures and techniques for combating the spill.
- Satisfy the requirements of the Oil Pollution Act of 1990.

Nothing contained herein replaces good judgment or prudent operating practices.

### **B. PLAN FORMAT**

This Plan is divided into two parts - the Emergency Response Action Plan (ERAP) and the Facility Response Plan (FRP) Manual. The ERAP is in a separate notebook and contains the information necessary to immediately combat a spill. It is arranged in a logical format so that response actions are not delayed and responders at all levels have the information they need to contain, recover and dispose of the oil. All ERAP Sections are included in the FRP Manual by reference.

The Facility Response Plan Manual contains the entire contents of the facility's response plan and is meant to serve as a backup and reference for the Emergency Response Action Plan. Copies of the Plan for each facility will be maintained at the facility's main office and by the FRP Coordinator.

### **C. PLAN DISTRIBUTION**

A copy of this Plan is distributed to Company personnel and others who may provide assistance during spill response activities. A distribution list is included in the preface of the Plan.

## **PLAN OVERVIEW**

### **D. UPDATE PROCEDURES**

This Plan will be updated as necessary. The Emergency Response Action Plan will be updated by the Emergency Response Coordinator at each facility when changes occur. At a minimum, the complete Plan will be reviewed annually by the facility Manager and the ERAP will be updated, reprinted, and redistributed at that time.

### **E. COMPANY POLICY/PHILOSOPHY**

It is Global's policy to exercise diligence in preventing spills. If one occurs from any Global operation, action should be taken promptly to contain and clean up the released substance and settle claims. Further, if any spill caused by another party occurs, prompt containment should be provided; however, clean-up and claims settlement will be handled by the responsible party. Global may perform cleanup if the responsible party's failure to do so is interfering with the safe and proper functioning of the facility's business.

### **F. PLAN SCOPE**

This Plan covers spills that could occur at the facility described in this Plan. Techniques and response procedures are included for spills onto land and spills that could enter waterways.

The facility's geographic location boundaries have been defined as the area occupied by the facility described in this Plan.

The Plan provides for response to spills for which Global assumes the responsibility and that may occur within the geographic location boundaries of the facility.

### **G. INTERFACE WITH OTHER PLANS**

Other response plans, operating plans, and manuals exist which apply to spills within the geographic area of this Plan. These include Area Contingency Plans. This Plan is designed so that Global will interface with other applicable plans. Priority to these plans will be adhered to pursuant to the appropriate federal, state, and local laws and regulations. The Global Incident Commander (QI) will be responsible for interfacing with the Federal and State On-Scene Coordinators.

### **H. GLOBAL REFERENCE FOR FRP FORMAT**

A cross-reference for the items required by the Oil Pollution Act of 1990 for both the United States Coast Guard and the Environmental Protection Agency are included in the tab entitled FRP Table of Contents and begin on page viii. Additional Federal and State regulations begin on page xvi.

**FACILITY INFORMATION**

**Refer to Section 1.0 in the Emergency Response Action Plan.**

## 2.0

## EMERGENCY RESPONSE

**Initial Response** (See Spill Response Flowchart in Appendix B and ERAP Section 2 for further internal and external notifications.)

Refer to the following sections in the Emergency Response Action Plan (ERAP) for this information:

<u>Facility Response Plan</u>	<u>ERAP</u>	<u>Section</u>
2.1	2.0	Emergency Notification Phone List
2.2	3.0	Spill Response Notification Form
2.3	4.0	Emergency Response Personnel

## 2.4

## RESPONSE EQUIPMENT

Refer to Section 5.0 in the ERAP for the following:

<u>Facility Response Plan</u>	<u>ERAP</u>	<u>Section</u>
2.4.1	5.0	Facility Response Equipment

### 2.4.2

### CONTRACTOR EQUIPMENT

Global has multiple contracts with multiple responders OSROs. The primary OSRO is National Response Corporation. **Evidence of OSRO contracts is included in the FRP Appendix E.**

OSRO Documentation, as required by the PREP, is available for inspection at the terminal.

### 2.4.3

### CO-OP RESPONSE EQUIPMENT

The Terminal is not part of a Co-op.

### 2.4.4

### OTHER GLOBAL RESPONSE RESOURCES

In the event of a spill or other emergency, the response resources (equipment and personnel) at the facility would be utilized first. If additional resources were required contractor resources would be called upon. (A listing of these is shown in Appendix E of this Plan).

### 2.4.5

### OTHER RESPONSE RESOURCES

#### U.S. Coast Guard

The U.S. Coast Guard provides the pre-designated Federal On-Scene Coordinators (FOSC) for response to spills within the coastal zone of the United States. The Coast Guard also maintains continuously manned facilities that can be used for command, control, and surveillance of oil spills.

The USCG has several strike forces (Atlantic, Gulf and Pacific) that have expertise and equipment for control and cleanup for major spills available to the private sector generally after sources of equipment provided by private contractors have been exhausted. Their support may be obtained through the Federal On-Scene Coordinator.

#### U.S. National Oceanic and Atmospheric Agency (NOAA)

The National Oceanic and Atmospheric Agency provides meteorological, hydrologic and oceanographic data. Tide and current information as well as charts and maps can be obtained from NOAA. They also conduct satellite imagery and provide computer projections of short and long-range movements of major oil patches. The latter items are obtained via the Federal On-Scene Coordinator.

#### **U.S. Environmental Protection Agency (EPA)**

The Environmental Protection Agency provides expertise on environmental effects of pollution incidents and environmental pollution control techniques and acts as On-Scene Coordinator for spills in inland waterways.

#### **U. S. Navy Manager of Salvage (SUPSALV)**

The U.S. Navy Manager of Salvage (Washington, D.C.) maintains two large stockpiles of oil spill response equipment in Stockton, California and Williamsburg, Virginia. All or a portion of the contents of these stockpiles can be made available to Global for a response to an oil spill by a request made through the Federal On-Scene Coordinator.

## **2.5 EVACUATION PLAN**

Refer to Section 6.0 in the Emergency Response Action Plan.

## **2.6 EMERGENCY RESPONSE DUTIES**

The effectiveness of a facility's response to an oil spill of any size depends to a considerable degree on the individual(s) who will coordinate the response effort and the organization/structure that he/she has to work with. This section of the Plan details the qualifications of the Qualified Individual (Section 2.6.1), the facility's response organization and structure (Section 2.6.2), and an overview of Global's response management system (Section 2.6.3).

### **2.6.1 QUALIFIED INDIVIDUAL'S DUTIES**

The duties of the designated Qualified Individual or an adequately trained and qualified person appointed by the Coordinator are listed below.

- Activate and contract with necessary oil spill removal organizations.
- Act as liaison with the predesignated Federal On-Scene Coordinator (FOSC).
- Activate internal alarms and hazard communication systems to notify all facility personnel.
- Notify all response personnel, as needed.
- Identify the character, exact source, amount, and extent of the release, as well as the other items needed for notification.
- Notify and provide necessary information to the appropriate Federal, State and local authorities with designated response roles, including the National Response Center, State Emergency Response Commission, and Local Emergency Planning Committee.

- Assess the interaction of the spilled substance with water and/or other substances stored at the facility and notify response personnel at the scene of that assessment.
- Assess the possible hazards to human health and the environment due to the release.
- Assess and implement prompt removal actions to contain and remove the substance released.
- Coordinate rescue and response actions as previously arranged with all response personnel.
- Has authority to immediately access company funding to initiate cleanup activities.
- Direct cleanup activities until properly relieved of this responsibility.

## 2.6.2

### FACILITY RESPONSE ORGANIZATION/STRUCTURE

In case of a spill at the facility, the employee discovering the spill becomes the Incident Commander (IC) until relieved of this responsibility. The IC is responsible for managing all incident operations for the Field Response Team. The IC has been delegated the authority to effectively organize response activities and properly discharge all responsibilities that may be attributed to the Field Response Team as a result of an incident.

There is a pre-designated QI (Operations Manager) and Alternate QI (Terminal Manager), who have the authority to expend company funds and obligate resources. Once the QI is on site, he/she assumes the responsibility of IC.

The IC will direct all matters concerned with an incident so as to accomplish control of the situation expeditiously consistent with safety and minimizing impact. He/she will arrange for personnel assignments and relief.

The QI for the facility and his alternate are listed in Section 1.0 of the Emergency Response Action Plan. This individual is able to respond to an incident in a reasonable period of time and will coordinate activities until a member of Company management arrives from off-site to act as the Incident Commander if the need arises. If the size or nature of the spill is such that additional help from outside the function is required, outside contractors or the primary OSRO will be contacted for additional response resources.

#### Procedures for Preliminary Assessment of the Situation

The IC will assess the situation and identify the incident type, hazards involved, magnitude of the problem, and resources threatened. After the assessment, the IC and the Field Response Team will:

- Identify the immediate response goals, including protection of workers and the public.
- Take immediate actions to mitigate the situation, such as discharge/release control and fire fighting.
- Identify resources needed for response, including:
  - Global Resources
  - Contract Resources
  - Government Resources

## 2.6.3

### OVERVIEW OF GLOBAL'S RESPONSE MANAGEMENT SYSTEM

The Incident Command System utilized at the Facility is a scaled down version of the National Interagency Incident Management System Incident Command System (NIIMS ICS). The ICS model provides a recognized platform upon which an emergency or planned training event can be organized. Most federal emergency response

agencies as well as state and local agencies utilize the ICS. The National Response Team (NRT), a consortium of 13 federal agencies involved with major hazardous materials spills, has endorsed this system

Under the ICS, system the individual in charge of the response action is the Incident Commander (IC) who is supported by a command staff. If on-site personnel have not been trained to the IC level as specified in 29 CFR 1910.120, the QI, or senior emergency response personnel will assume the role of IC. The QI/IC directs all efforts in the event of an incident and receives input from a variety of other sources and support functional areas that include planning, logistics, operations and finance (see Figure 5). In the event of a major incident, IC duties may be undertaken by external personnel such as the Fire Chief or other senior emergency response personnel.

The QI will assume the role as the IC and direct all on-site incident response activities. The chain of command to be followed in the event of an emergency on-site includes individuals who have all been trained in the operation of the Terminal facility. The nature and characteristics of all stored materials, corporate safety policies and available means for containment and removal of spilled material must be considered. The following list presents the roles and responsibilities of people within Global's Incident Command/Response Management Structure.

#### **Qualified Individual (Incident Commander)**

In charge of Emergency Response operations and implementation of emergency response elements. This person is responsible for the overall management of the operations, including the development of overall strategic objectives. This person is also accountable for discharge prevention and reports to facility management. This person also communicates with senior company management, government agencies and the media, as necessary. The QI works with the senior representatives of external response organizations. The QI shall be responsible for implementation of the Incident Command System; have complete knowledge of the ICP; understand the risk and hazards associated with the products stored on-site; be responsible for control and prevention of such hazards; and be familiar with the Federal, State and Local Response Plans.

#### **Public Information Officer**

Compiles information about the spill, to be released to the media. Writes and distributes all press releases at the direction of the Incident Commander.

#### **Environmental, Health and Safety Compliance Officer**

This person works with the QI to determine spill conditions and notification requirements; monitors and assesses hazardous situations and potential impacts to the environment; and, works with spill response contractors to ensure that applicable health and safety measures are conducted; and takes measures to avoid or mitigate them. This person coordinates efforts with the OSRO in developing the Medical Emergency Plan and Site Specific Health and Safety Plan, obtaining medical aid and transportation for injured and ill emergency response personnel, and preparing and maintaining medical reports and records. This person reports to Command and Control (QI/IC). This person is also responsible for ensuring that environmental assessment and remediation efforts and other sustained actions are conducted in conformance with applicable environmental regulations.

#### **Government Agency Liaison**

Assist Command and Control. Works with federal, state and local agencies to ensure appropriate government directives are met. This individual becomes the liaison between all government agencies and the Incident Commander.

#### **Operations**

Works directly with Company-hired spill response contractors and OSRO operations supervisors regarding all field activities. This person works with Command and Control in the development of the General Spill Response Plan. This individual oversees the implementation of the day to day spill response operation to ensure that the plan initiated by Command and Control is implemented with the OSRO. This person is responsible for discharge prevention and reports to Operations/Facility management.

#### **Planning**

Works directly with the Company-hired OSRO Planning Supervisor in coordinating the development of status reports for Command and Control. Planning provides technical services to support emergency response operations and handles environmentally related matters during emergency response operations. Included in the chart of the Unified Command System to be used during an incident.

#### **Logistics**

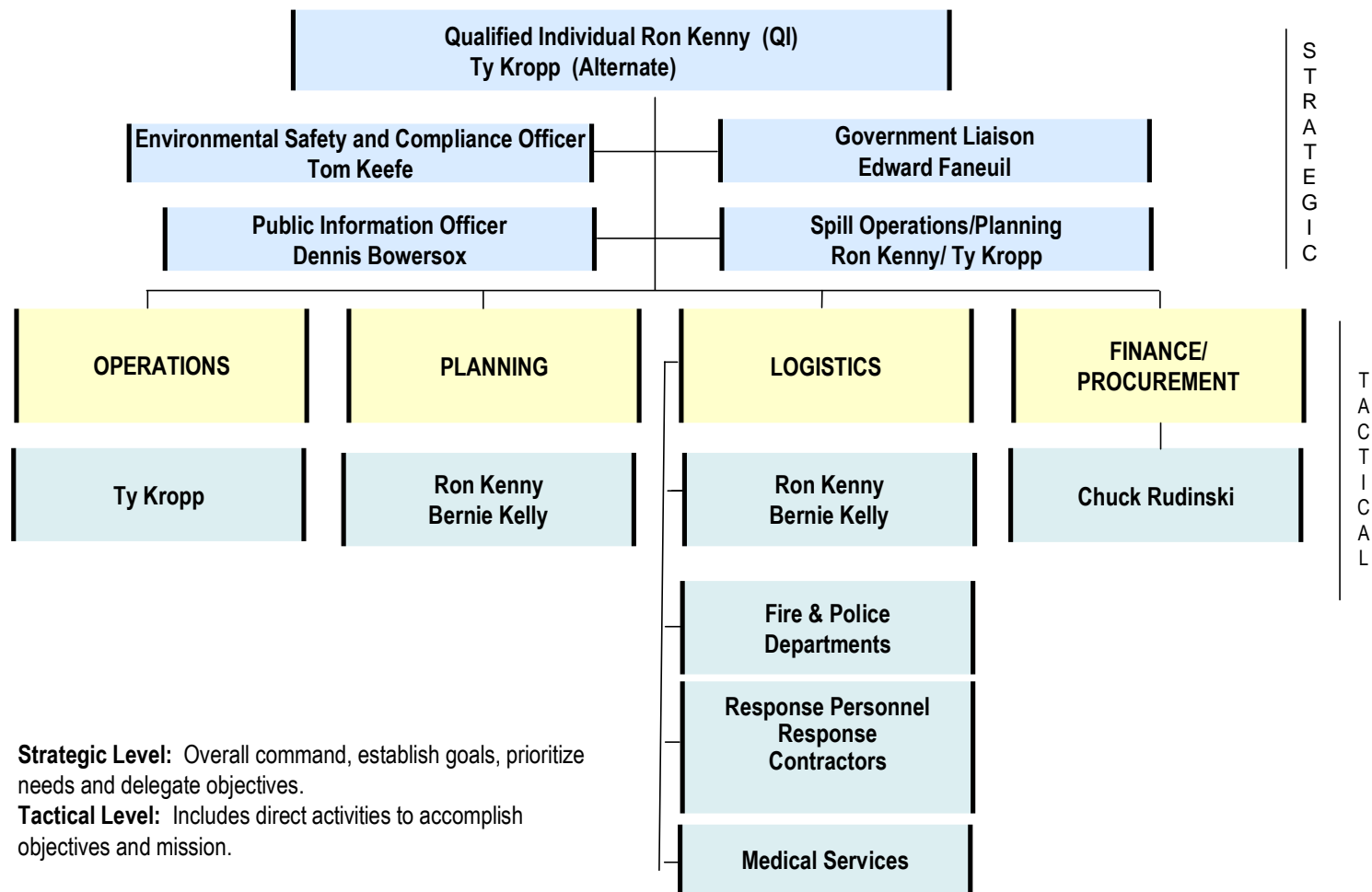


Works in management of site and operations and response including addressing site security communication system, medical needs (if necessary), support for personnel and equipment, equipment maintenance and modes of transportation.

**Finance/Procurement/Administration**

Overall administration and finance of personnel, outside resources and support equipment, internal response equipment and OSRO contracting, and claims and cost.

In the event of an emergency, Global will be organized under the Incident Command System as shown below



### 3.0

#### HAZARD IDENTIFICATION AND EVALUATION

This section examines the facility owner/operator to predict where releases could occur. Hazard evaluation is a widely used industry practice that allows owners and operators to develop a complete understanding of potential hazards and the response actions necessary to address these hazards.

Hazard identification and evaluation will assist facility owners and operators in planning to potential releases, thereby reducing the severity of discharge impacts that may occur in the future. The evaluation also may help the operator identify and correct potential sources of releases. In addition, special hazards to workers and emergency response personnel's health and safety will be evaluated.

### 3.1

#### HAZARD IDENTIFICATION-TANKS AND SURFACE IMPOUNDMENTS ABOVE GROUND STORAGE TANKS

TANK #	SUBSTANCE STORED	TANK TYPE /YEAR	SHELL CAPACITY (Gallons)	FAILURE/ CAUSE	SECONDARY CONTAINMENT
20	Gas Additive	Steel/1980	10,370	None	Concrete
21	Distillate	Steel/1979	851,340	None	50 mil Liner
22	Distillate	Steel/1936	298,620	None	50 mil Liner
23	Distillate	Steel/1936	298,620	None	50 mil Liner
24	Gasoline / Distillate	Steel/1962	127,260	None	50 mil Liner
25	Gasoline	Steel/1946	307,230	None	50 mil Liner
26	Distillate	Steel/1954	2,153,760	None	50 mil Liner
27	Distillate	Steel/1962	2,152,290	None	50 mil Liner
28	Distillate	Steel/1994	300	None	Steel
29	Gas Additive	Steel/1986	1,000	None	Steel
30	Distillate	Steel/1973	799,050	None	Natural Clay
31	Distillate	Steel/1930	396,480	None	Natural Clay
32	Distillate	Steel/1930	591,780	None	Natural Clay
33	Distillate	Steel/1930	394,800	None	Natural Clay
34	Slop Oil	Steel/2003	500	None	Concrete
		TOTAL	8,383,400		

The tanks listed above are not limited to their respective substance listed. Substances stored in the tanks may change due to the needs of the Terminal.

Copies of the NYSDEC CBS Hazardous Substance Bulk Storage Registration Certificate CBS Number 3-000025 and MOSF License 3-1460 are maintained at the Facility.

#### BELOW GROUND TANKS There are no below ground tanks at the facility

### SURFACE IMPOUNDMENTS

There are no surface impoundments at this facility.

### 3.2

#### CONTAINMENT VOLUME ANALYSIS

Secondary Containment Dike				
Tank Dike ID	Largest Shell Capacity, gal*	Dike Volume, gal	Containment Capacity, %	Comments
East Tank Field: ^30, 31, 32, 33	841,512*	1,057,320	127%	See Dike Capacity Evaluation –Richard Hanback 10/28/09
West/ North Tank Field: ^21, 22, 23, 24, 25	851,383*	1,054,760	124%	See Dike Capacity Evaluation –Richard Hanback 10/28/09
West/ South Tank Field: ^26, 27	2,153,834*	2,520,057	117%	See A Dike Capacity Evaluation –Richard Hanback 10/28/09

^ Largest tank in tank dike

\* Note that as a conservative measure the Shell Capacity is based on the dimension of the largest tank. This is larger than the maximum oil storage capacity indicated on the facility tank charts.

Tank ID	Shell Capacity, gal	Tank Dike Measurements			Volume, gal	Containment Capacity, %
		Length, ft	Width, ft	Depth, ft		
20	10,370	16.25	23.2	3.7	14,527	140
		12.75	23.2	1.85		
28	300	6.9	5.1	3.8	1,000	333
29	1000	12	6.5	4	2,334	230
34	500	Truck Loading Rack				>110

### 3.3

#### THROUGH-PUT VARIABILITY ANALYSIS

Normal daily throughput is 720,000 gallons. An increase or decrease in throughput would not substantially impact the probability of a spill at the facility.

### 3.4

#### RECEIPT & DELIVERY HAZARD EVALUATION

**Truck Receipt** - Additives and fuels for smaller tanks are received by tank truck and releases could occur. Occasionally product is also received from another terminal via tanker truck and likewise could result in a release. The release volume could be as much as 7 kG, by hose, valve, pipe or pump failure.

**Truck Loading** - Truck loading procedures, although there are many safeguards, could result in release. This release volume could range from a drip to 14.3 kG (largest tanker). Causes could be line failure, loading arm failure, meter failure, trailer valve or tank shell rupture.

**Barge Receipt** - Release could occur due to piping rupture, hose rupture, valve failure, sample line failure, gasket failure, pressure relief line failure, tank overfill or catastrophic tank failure.

**Barge Loading** - Release could occur due to piping rupture, hose rupture, valve failure, sample line failure, gasket failure, pressure relief line failure or tank overfill.

### 3.5

#### FACILITY OPERATIONS HAZARD EVALUATION

**Daily Operations** - Operations on a day-to-day basis at the Terminal that could result in a release of hazardous substance are as follows:

Truck Fueling Dispenser - Release could occur due to hose rupture, hose being dropped with nozzle still open, vehicle tank being overfilled, or vehicle fuel tank failure. This release should be no more than 55 gallons as our procedures require the driver to be at the hose at all times during the refueling process.

Terminal Maintenance - Release could occur during normal M&R such as valve replacement, pump replacement, line replacement or repair. Failure to close proper valves, drain lines, or follow safe repair maintenance guidelines could result in releases of up to 100 gallons. The probability of this is greatly reduced by our procedure requiring the terminal operator to be in the area while this type work is being done.

Drawing Water - Release could occur during water draw-off procedures if a valve could not be closed or if the return pump failed to turn on as necessary. This could result in a release of approximately the volume of the largest tank.

Marine Receipt - Release could occur due to piping rupture, hose rupture, valve failure, sample line failure, flange gasket failure, pressure relief line failure, tank overfill or catastrophic tank failure.

Pipeline Receipt - Release could occur due to pipeline rupture, valve failure, sample line failure, gasket failure at flange, pressure relief line failure, tank overfill or catastrophic tank failures.

Truck Loading - Release could occur due to line failure, loading arm failure, loading valve on trailer failure, trailer shell or lines rupturing, trailer overfill.

Pumpback Pad - Release could occur due to hose failure, pump failure, valve line or gasket failure, trailer valve failure or trailer rupture, tank overfill or catastrophic tank failure.

Additive Pump Off - Release could occur due to hose, pump, line, trailer valve failure or trailer rupture, tank overfill or catastrophic tank failure.

Terminal Maintenance - Release could occur during normal M&R due to failure to close proper valves on tanks, failure to replace old gaskets at flanges, improper maintenance methods.

The immediate danger of a release at this facility is the danger of fire or explosion. Upon discovery of a release operations should be shut down immediately, as necessary, to minimize sources of ignition. All personnel in the facility should be alerted by two-way communications or by sounding the fire alarm. They should then proceed to the designated areas and proceed with emergency response notification and response plans. Before re-entering the release area appropriate personal protective equipment should be donned and the area checked with a four gas meter.

### 3.6

#### VULNERABILITY ANALYSIS

This analysis was performed to address the potential effects to human health, property, and/or the environment should a spill occur at Global Companies LLC's (Global) Newburgh South Terminal (terminal) in New Windsor, New York. The analysis is consistent with the Environmental Protection Agency's (EPA) final rules published July 1, 1994, which revised the Oil Pollution Prevention regulation under the Clean Water Act (CWA) and incorporated new regulations added by the Oil Pollution Act of 1990 (FRP). As stipulated in 40 CFR 112, Appendix C and Section 1.4.2 of Appendix F, this analysis identifies the proximity of environmentally sensitive areas to the facility and helps prioritize vulnerable areas for protection in the event of a discharge.

The terminal is situated in New Windsor, New York on the western shore of the Hudson River. The terminal consists of a main office building, loading rack, and bulk storage tank farm. Quassaick Creek is located north of the terminal. The Hudson River is one of fourteen American Heritage Rivers in the United States and serves as both an estuary and as a commercial and recreational waterway. The Hudson River Estuary extends for 153 miles of the river's 315-mile length and includes the area from south of the Troy Bridge to the mouth of the Hudson River. The Hudson River supports over 206 species of fish, many endangered and threatened species including the bald eagle and heartleaf plantain, and is an important flyway for migratory birds.

#### Planning Distance

In the event of a worst case discharge, non-persistent petroleum product could potentially flow from the terminal grounds into the Hudson River. The Hudson River is tidally influenced at New Windsor, as such, the planning distance is five miles from the terminal down current during ebb tide and to the point of maximum tidal influence or five miles, whichever is less, during flood tide as stated in Section 4.2 of Attachment C-III to 40 CFR 112.

Calculation of the planning distance is based on the following terminal and vicinity characteristics presented below in segments as shown on Figures 2 through 4:

The nearest moving body of water located near the terminal is the Hudson River.

Petroleum product released from the terminal would likely flow east towards the Hudson River. The product would flow into the Hudson River as described in segments A and B.

Segment A represents flow on an ebb tide and segment B represents flow on a flood tide. Calculation of the planning distance is based on the following terminal and vicinity characteristics presented below in segments as shown on Figures 2 and 3:

Segment B: Five miles up current during flood tides in the Hudson River.

Following is a summary of segment distances and times for the terminal:

- Segment A: Hudson River (Ebb Tide) 5.0 miles
  - Segment B: Hudson River (Flood Tide) 5.0 miles
- Total Planning Distance: 10.0 miles**

## VULNERABILITY ANALYSIS

### Sensitive Resources

The EPA provided a list of resources in 40 CFR 112, Appendix C and Section 1.4.2 of Appendix F, to be considered in the evaluation of potential risk factors. This list includes schools, medical facilities, residential areas, wetlands, drinking water intakes, wildlife areas, marine and estuarine reserves, and recreational areas and is intended to direct planning efforts toward the protection of important environmental and community resources.

Identification of these resources is documented through published data and communications with appropriate agencies. For the purpose of this Vulnerability Analysis, the terminal vicinity is defined as the area surrounding the terminal outside the study area. The study area used to determine potential impacts to sensitive resources is defined as a 2,000-foot radius around the terminal and a spill easement of 1,000 feet on either side of the water body for the planning distance. Contact information for the sensitive resources is contained in Table 1.

**Water Intakes/Public Water Supply:** Below is a listing of the public water intakes along the Hudson River that are listed in the NOAA Environmental Sensitivity Index Maps (#s 6 and 7) for the Hudson River dated February 2006. According to Mike Holt of the NYSDEC, private water intakes associated with industrial activities are not regulated by the NYSDEC. The list of industrial intakes may not include all industrial water intakes along the Hudson River within the planning distance.

Water Intake	Location	Distance and Direction from Terminal
Roseton Power Station	West bank Hudson River	5.75 miles north
Danskammer Power Station	West bank Hudson River	6.5 miles north
City of New York Delaware Water Supply	East bank Hudson River	6.25 miles north

According to New York State's Wellhead Protection Plan, the wellhead protection area for each well extends to the edge of the aquifer the well draws water from. The wells and their approximate distance and direction from the terminal are listed below.

Public Water Well	Distance and Direction from Terminal
Our Lady of Hope Center Well #1	4.5 miles north
Our Lady of Hope Center Well #2	4.5 miles north

**Businesses/Economic Resources:** There are 10 businesses in the area as noted on Table 1. These businesses are also located in the ERAP Section 2, Notification Phone List.

## VULNERABILITY ANALYSIS

**Schools and Hospitals:** No schools were identified within a 2,000-foot radius of the terminal and eight schools were identified within 1,000 feet of the potential product flow path near the Hudson River. The schools are listed below with their location relative to the terminal and closest water-body.

School	Distance, Water-Body, and Direction from Water-Body	Distance and Direction from Terminal
Within 1,000 feet of the potential product flow path		
Horizon on the Hudson School	600 feet west of Hudson River	1.8 miles north
Newburgh School	1000 feet west of Hudson River	1.8 miles north
Oblate Fathers School	1000 feet west of Hudson River	4.4 miles north
Our Lady of Loretto School Garden	1000 feet west of Hudson River	5.5 miles south
U.S. Military Academy – West Point	Adjacent east and west bank of Hudson River	6.5 miles south
Sargent School	600 feet north of Fishkill Creek	1.9 miles east northeast
St. Joachim/St. John Schools	600 feet south of Fishkill Creek	2.5 miles east northeast
J V Forrestal School	600 feet south of Fishkill Creek	2.6 miles east northeast

No hospitals were identified within a 2,000-foot radius of the terminal and two hospitals were identified within 1,000 feet of the potential product flow path near Fishkill Creek. The hospitals are listed below with their location relative to the terminal and closest water-body.

Hospital	Distance, Water-Body, and Direction from Water-Body	Distance and Direction from Terminal
Within 1,000 feet of the potential product flow path		
Craig House Center	1000 feet southeast of Fishkill Creek	2.5 miles east
St. Francis Hospital Turning Point	500 feet north of Fishkill Creek	3.5 miles northeast

**Residential Areas:** Residential communities are located approximately 0.3 miles north and 0.5 miles west of the terminal. Several residential communities are scattered along the Hudson River within the planning distance.

**Utilities:** Two utilities were identified within the planning distance. The utilities are listed below with their location relative to the terminal and closest water-body.

Utilities	Location	Distance and Direction from Terminal
Roseton Power Station	Adjacent west bank Hudson River	5.75 miles north
Danskammer Power Station	Adjacent west bank Hudson River	6.5 miles north

**National and State Parks:** There are two state parks located within 1,000 feet of the potential product path near the Hudson River: Hudson Highlands State Park and Storm King State Park. The Hudson Highlands State Park is an undeveloped preserve which provides nesting sites for peregrine falcons and common ravens. The parks are listed below with their location relative to the terminal and closest water-body.



## VULNERABILITY ANALYSIS

National or State Park	Distance, Water-Body, and Direction from Water-Body	Distance and Direction from Terminal
Within 1,000 feet of the potential product flow path		
Hudson Highlands State Park	Adjacent east bank Hudson River	0.75 miles east – 6.0 miles southeast
Storm King State Park	Adjacent west bank Hudson River	4.0 miles south southeast

**Recreational Areas:** Several recreational areas including various parks and recreational clubs are located within the study area. The recreational areas are presented below with their location relative to the terminal and the closest water-body.

Recreational Area	Distance, Water-Body, and Direction from Water-Body	Distance and Direction from Terminal
Within 2,000 feet of terminal		
Unnamed Park	4,000 feet west of Hudson River and adjacent south to Quassaick Creek	2000 feet west
Within 1,000 feet of the potential product flow path		
Madam Brett Park	Adjacent both banks Fishkill Creek where intersects with Hudson River	0.75 miles east
Little Falls Park	Adjacent south Quassaick Creek	2.1 miles west
Beacon Point	Adjacent east bank Hudson River	1.3 miles northeast
Riverfront Park	Adjacent east bank Hudson River	2.0 miles northeast
Southern Dutchess Country Club	1,000 feet west of Hudson River	2.5 miles northeast
Memorial Park	800 feet north of Fishkill Creek	3.0 miles northeast
Pollepel (Bannermans) Island	Island located in Hudson River	2.0 miles southeast
Castlepoint Park	Adjacent west bank Hudson River	5.5 miles northeast
Donahue Memorial Park	Adjacent west bank Hudson River	3.0 miles south southeast
Foundry Dock Park	Adjacent east bank Hudson River	5.5 mile southeast
Little Stony Point	Adjacent east bank Hudson River	4.0 miles south

**Lakes and Streams:** Several water bodies are located within the study area. The water bodies are listed below with their location relative to the terminal and closest water-body.

Water Body	Flow Direction	Distance and Direction from Terminal
Hudson River	South	Adjacent east
Quassaick Creek	East into Hudson River	0.5 miles north
Denning Point Bay	West into Hudson River	1.5 miles northeast
Fishkill Creek	West into Hudson River	1.5 miles northeast
Gordan's Brook	West into Hudson River	2.0 miles southeast
Moodna Creek	East into Hudson River	1.5 miles south
Breakneck Brook	West into Hudson River	4.0 miles south
Clove Creek Cove	West into Hudson River	3.0 miles south
Foundry Cove	Adjacent Hudson River	5.5 miles south

**Scenic and Wild Rivers:** No Wild and Scenic Rivers are located within the study area.

## VULNERABILITY ANALYSIS

**Conservation Areas and Preserves:** Several preserves and forests line the Hudson River. The Fishkill Ridge Conservation Area includes more than 1,900 acres and supports several eagles and falcons.

Two wildlife preserves are located less than 0.5 miles south of the planning distance: Constitution Marsh Sanctuary and West Point Foundry Preserve. The Constitution Marsh Sanctuary is comprised of a fresh/brackish tidal marsh and forested upland (80 acres). Due to its proximity to the planning distance, several of the observed species may also be observed at locations along the Hudson River. Constitution Marsh Sanctuary supports a broad diversity of birds during wintering months and during the fall migration period, with an average of 1,500 birds and with occasion peak counts of 4,000. Some of the species that use the site during migration and/or winter include pied-billed grebes, ospreys, bald eagles, northern harriers, and peregrine falcons. Fall swallow concentrations at the site typically number about 20,000 individuals, but can reach as high as 100,000. Six state listed birds have been identified to use the Constitution Marsh Sanctuary for breeding, migration, or as their primary habitat, including the peregrine falcon, bald eagle, pied-billed grebe, least bitter, northern harrier, and osprey.

The conservation area or preserve is listed below with their location relative to the terminal and Hudson River.

Conservation Area or Preserve	Distance, Water-Body, and Direction from Water-Body	Distance and Direction from Terminal
Fishkill Ridge Conservation Area	Adjacent east bank Hudson River	1.25 miles northeast
Kowawese State Unique Area	Adjacent west bank Hudson River	1. 5 miles south
Moodna Creek Marsh	Adjacent west bank Hudson River	1.5 miles south
West Point Foundry Preserve	Adjacent east bank Hudson River	6.5 miles south
Foundry Cove	Adjacent east bank Hudson River	5.5 miles south
Constitution Marsh Sanctuary	Adjacent east bank Hudson River	6.0 miles south

**Wetlands:** The Hudson River Estuary includes approximately 153 miles of the Hudson River and includes the area from south of the Troy Bridge to the mouth of the Hudson River. The Hudson River tides create the estuary, which includes a wide range of wetland habitats including:

Coastal Shoals, Bars and Mudflats,  
Vegetated Coastal Shoals,  
Bars and Mudflats,  
Broad-Leaf Vegetation,  
Eelgrass Beds,  
Graminoid Vegetation,  
Swamp Shrub, and  
Swamp Tree.

Tidal wetlands are located along the lower Hudson River and are dominated by grasses and other marsh plants which are adapted to the tides. Marsh grass supports a variety of small fish and other animals. The estuary supports a large variety of fish, shellfish, migratory birds, waterfowl, turtles, frogs, and insects.

**Transportation Routes (air, land, and water):** Interstate 84 is located approximately 2.5 miles north of the terminal and runs east west. Highway 9W is located approximately 0.5 miles west of the terminal and runs north south. The closest airport, Stewart International Airport, is located approximately 7.0 miles west of the terminal.

## VULNERABILITY ANALYSIS

**Cultural and Archaeological Resources:** No historic resources were identified within 2,000 feet of the terminal. Twelve (12) historic resources are located within the study area. The historic resources are listed below with their location relative to the terminal.

Historic Resource	Location	Direction distance Terminal	and from
Within 1,000 feet of the potential product flow path			
Brett, Madam Catharyna, Homestead	50 Van Nydeck Avenue, Beacon, New York	4.0 miles east	
Eustatia	12 Monell Place, Beacon, New York	2.7 miles northeast	
Howland Library	477 Main Street, Beacon, New York	4.1 miles east	
Tioronda Bridge	South Avenue, Beacon, New York	4.0 miles east	
Bannerman's Island Arsenal	Pollepel Island	2.0 miles southeast	
Fishkill Supply Depot Site	Route 9, Fishkill, New York	1.0 miles east	
Maple Lawn	24 Downing Street, Balmsville, New York	3.5 miles north	
Washington's Headquarters	84 Liberty Street, Newburgh, NY	1.3 miles north	
David Crawford House	189 Montgomery Street, Newburgh, New York	2.0 miles north	
East End Historic District	Roughly bounded by Robinson Ave., LeRoy Place., Water St., Bay View Terr., Monument; and Renwick Streets in Newburgh, New York	2.0 miles north	
Old Town Cemetery and Palatine Church Site	Grand Street, Newburgh, New York	2.0 miles north	
West Point Foundry	Foundry Cove between NY 90 and NY Central RR tracks	6.5 miles south	

Critical Habitats for Endangered and Threatened Species: The following information was obtained from the US Fish and Wildlife Service's "**SIGNIFICANT HABITATS AND HABITAT COMPLEXES OF THE NEW YORK BIGHT WATERSHED, Mid-Hudson River Estuary**".

The vegetational and faunal communities found in and along the Hudson depend on the river's depth and salinity. The *deepwater tidal river* zone occurs below the depths that support plant growth, about 2 meters (6 feet) in the turbid Hudson. Primary production in this zone comes only from phytoplankton. These deepwater zones generally have swift currents and rocky bottoms. The two sections of deepwater within the mid-estuary are **Hudson River 44-56** and the **Poughkeepsie Deepwater**. The *shallow subtidal zone* occurs below mean low tide but above the deepwater zone. Submerged aquatic vegetation may occur in narrow, shallow, subtidal bands along the shoreline and in a few wider shoals areas such the shoals along the Fishkill-Beacon shoreline. Characteristic plants include waterweed (*Elodea nuttallii*), coontail (*Ceratophyllum demersum*), naiad (*Najas guadalupensis*), sago pondweed (*Potamogeton pectinatus*), horned pondweed (*Zannichellia palustris*), and widgeon grass (*Ruppia maritima*). Water chestnut occupies substantial portions of this part of the river from river kilometer 93 (river mile 58) (Pollapel Island) north to about river kilometer 105 (river mile 65) (Chelsea). The *tidal zone* in the Hudson consists of sparsely vegetated intertidal shore and flats and tidal marsh communities. Because of the generally steep shoreline, deep water, and strong currents in this stretch of the river, **marshes and flats** occur only at the mouths of tributaries or in the shelter of islands where

sediment can accumulate. The four major tributaries in this part of the Hudson are from south to north: **Annsville Creek, Moodna Creek, Fishkill Creek, and Wappinger Creek**. Marshes and tidal flats occur at these tributary mouths and behind **Iona Island, Constitution Island, and Con Hook**. Mudflats contain arrowheads (*Sagittaria* spp.), wild celery (*Vallisneria americana*), and mud-plantain (*Heteranthera reniformis*), as well as diverse assemblages of periphyton (attached algae) and bacteria. Freshwater mudflats found from Wappinger Creek north contain several of these species as well as mudwort (*Limosella australis*). Brackish and freshwater marshes in the Hudson can generally be divided into lower and upper marsh zones. The lower marsh generally experiences large daily fluctuations in water levels and is characterized by peltate-leaved plants (broad leaves on long stalks arising from the plant's base). Characteristic plants include spatterdock (*Nuphar advena*) in deeper water interspersed with pickerelweed (*Pontedaria cordata*), big-leaved arrowhead (*Sagittaria latifolia*), and arrow arum (*Peltandra virginica*) in shallower water. In areas with sandy substrate, common three-square bulrush (*Scirpus pungens*), water smartweeds (*Polygonum amphibium*), and bur-marigolds (*Bidens* spp.) are characteristic. The upper marsh is only partially flooded during the daily tidal cycle and is characterized by an emergent marsh community. Dominant plants are narrow-leaved cattail (*Typha angustifolia*) and the invasive common reed (*Phragmites australis*). In the wetter areas of the upper marsh, the cattail and reed are mixed with wild rice (*Zizania aquatica*), rice cut grass (*Leersia oryzoides*), river bulrush (*Scirpus fluviatilis*), and sweet flag (*Acorus americanus*).

In addition to the important marsh communities occurring at the mouths, tributaries provide freshwater inflow into the Hudson system, spawning habitat for herrings, and overwintering areas for black bass (*Microterus* spp.). The **adjacent uplands** along the mid-estuary shoreline, especially in the Highlands, support a variety of rare plant and animal species. For detail on these communities, please see the habitat narrative and maps for the New York - New Jersey Highlands.

**ECOLOGICAL SIGNIFICANCE/UNIQUENESS OF SITE:** The Hudson River estuary is a productive and regionally significant estuary supporting important populations of fish and wildlife, as well as rare communities and plants. The mid-Hudson River estuary supports a variety of marine, brackish, and freshwater communities, incorporating 83 species of special emphasis, including the following federally and state-listed species. (Living resources and their habitats are dynamic; therefore, the ecological significance and species information presented here may not be complete or up-to-date. State and federal environmental agencies should be consulted for additional information.)

**Federally listed endangered**

shortnose sturgeon (*Acipenser brevirostrum*)

**Federally listed threatened**

bald eagle (*Haliaeetus leucocephalus*)

**Federal species of concern<sup>(1)</sup>**

southern estuarine beggar-ticks (*Bidens bidentoides*)

<sup>1</sup>Species of special concern listed here include former Category 2 candidates.

**State-listed endangered**

cylindrical-headed bulrush (*Scirpus novae-angliae*)  
pygmyweed (*Tillaea aquatica*)

**State-listed threatened**

American bittern (*Botaurus lentiginosus*)  
osprey (*Pandion haliaetus*)

**State-listed special concern animals**

banded sunfish (*Enneacanthus obesus*)  
least bittern (*Ixobrychus exilis*)

**State-listed rare plants**

spongy arrowhead (*Sagittaria calycina* var. *spongiosa*)  
Bush's sedge (*Carex bushii*)  
clustered sedge (*Carex cumulata*)  
necklace sedge (*Carex hormathodes*)  
weak stellate sedge (*Carex seorsa*)  
slender crabgrass (*Digitaria filiformis*)  
kidneyleaf mud-plantain (*Heteranthera reniformis*)  
smooth bur-marigold (*Bidens laevis*)  
pinweed (*Lechea racemulosa*)  
yellow harlequin (*Corydalis flavula*)  
redrooted flatsedge (*Cyperus erythrorhizos*)  
salt marsh spikerush (*Eleocharis halophila*)  
starwort (*Callitriche terrestris*)  
slender knotweed (*Polygonum tenue*)

The open water and tidal wetlands in this reach of the Hudson are regionally significant as spawning and nursery habitats and as a migratory pathway between the upper and lower estuary for anadromous and resident fish. Striped bass (*Morone saxatilis*) and Atlantic sturgeon (*Acipenser oxyrinchus*) that are spawned in this area contribute greatly to the North Atlantic stock. The habitat contains many unusual features, including deep tidal river habitat that is a rare ecosystem type in the eastern United States, and an important winter foraging area for the federally listed threatened bald eagle (*Haliaeetus leucocephalus*). The numerous creeks and tidal brackish and freshwater marshes in this stretch serve as breeding, nursery, and migration corridors for fish and wildlife.

**Constitution Marsh** is a 161-hectare (400-acre) freshwater to brackish tidal marsh, dominated by narrow-leaved cattail emergent marsh; the remainder is intertidal mudflats and subtidal aquatic vegetation beds. It is located on the east side of the Hudson River south of the village of Cold Spring and is the largest undeveloped brackish tidal wetland on the Hudson River. A number of quality freshwater inflows makes this area an important breeding and feeding area for marsh-nesting birds, including least bittern, green-backed heron, Canada goose, mallard, wood duck, American black duck, sora, common moorhen, spotted sandpiper, belted kingfisher, marsh

wren, fish crow (*Corvus ossifragus*), common yellowthroat (*Geothlypis trichas*), hooded warbler (*Wilsonia citrina*), red-winged blackbird, and swamp sparrow. The state-listed threatened osprey, waterfowl, herons, and shorebirds use this area during their spring and fall migrations.

Overwintering waterfowl include mallard, American black duck, Canada goose, mergansers, and canvasback. The stream mouths and shallow water areas are spawning and nursery areas for anadromous fish including alewife, blueback herring, white perch, and striped bass, and for resident estuarine and freshwater species such as mummichogs, banded killifish, and largemouth bass. Snapping turtle take advantage of this forage base and are found in large numbers. Rare plants in the marsh include spongy arrowhead and smooth bur-marigold. Rare natural communities occurring on **Constitution Island** include a granite/gneiss cliff community and pitch pine-oak-heath rocky summit. Rare plants found on the island include Long's bittercress, clustered sedge, weak stellate sedge, yellow harlequin, slender crabgrass, pygmyweed, and taperleaf bugleweed (*Lycopus rubellus*).

**Moodna Creek-Cornwall Bay** is located north of the village of Cornwall on the west side of the Hudson River at river kilometer 92 (river mile 57). The habitat includes the creek from its mouth to the first dam just upstream of Route 32 at Orrs Mill, approximately 5.6 kilometers (3.5 miles). The tidally influenced portion of the creek, the lower 1.6 kilometer (1 mile), provides rare natural brackish communities, including tidal marsh and intertidal mudflats. One rare plant, spongy arrowhead, occurs in this area. There are extensive flats at the creek mouth and bay area that form a productive breeding habitat for least bittern, green-backed heron, Canada goose, mallard, wood duck, black duck, Virginia rail, spotted sandpiper, belted kingfisher, marsh wren, fish crow, common yellowthroat, hooded warbler, red-winged blackbird, downy woodpecker (*Picoides pubescens*), northern flicker (*Colaptes auratus*), eastern kingbird (*Tyrannus tyrannus*), and swamp sparrow. This area is a known migration corridor along the north slope of the Highlands for raptors, including bald eagles, which are consistently observed in the summer and winter. The area supports a diversity of other wildlife species, including raccoon (*Procyon lotor*), muskrat, white-tailed deer (*Odocoileus virginianus*), snapping turtle, green frog, and northern water snake. Moodna Creek is an important spawning area for anadromous fish, including alewife, blueback herring, rainbow smelt (*Osmerus mordax*), tomcod, white perch, and striped bass; the creek mouth provides nursery habitat. Various warmwater freshwater resident fish use the lower creek year-round, including largemouth bass (*Micropterus salmoides*), introduced bluegill (*Lepomis macrochirus*), indigenous pumpkinseed (*Lepomis gibbosus*), and brown bullhead. Marine species associate within this area when the salt front moves north in the dry season.

**Fishkill Creek** is on the east side of the Hudson in the city of Beacon at river kilometer 96 (river mile 60). The lower 2.4 kilometers (1.5 miles) of the creek from the mouth to the first dam is an important spawning area for anadromous fish. Between April and June it is extensively used by spawning alewife, blueback herring, and white perch. Tomcod spawn here in December and January. Marine fishes including bluefish, hogchoker, anchovy, and silversides are occasionally found here, and it is probably the northern extent of blue crab in the estuary. Resident freshwater species include largemouth bass, bluegill, brown bullhead, and goldfish. Both Fishkill and Wappinger Creeks are important overwintering areas for largemouth bass. Raptors migrating along the Highlands use this area as a major crossing of the Hudson Valley, and osprey are

regularly sighted during the spring migration period. The creek also provides habitat for important resident furbearers and turtles, as well as feeding and resting areas for waterfowl. Invasion of the open water creek mouth area by water chestnut (*Trapa natans*) has reduced some of this area's habitat value; however, rare plant species such as northern estuarine beggar ticks (*Bidens hyperborea*), smooth bur-marigold, and heartleaf plantain (*Plantago cordata*) occur in the estuary area.

**Flora and Fauna:** The following information was obtained from the US Fish and Wildlife Service's "SIGNIFICANT HABITATS AND HABITAT COMPLEXES OF THE NEW YORK BIGHT WATERSHED, Mid-Hudson River Estuary".

The vegetational and faunal communities found in and along the Hudson depend on the river's depth and salinity. The **deepwater tidal river** zone occurs below the depths that support plant growth, about 2 meters (6 feet) in the turbid Hudson. Primary production in this zone comes only from phytoplankton. These deepwater zones generally have swift currents and rocky bottoms. The two sections of deepwater within the mid-estuary are **Hudson River 44-56** and the **Poughkeepsie Deepwater**. The **shallow subtidal zone** occurs below mean low tide but above the deepwater zone. Submerged aquatic vegetation may occur in narrow, shallow, subtidal bands along the shoreline and in a few wider shoals areas such the shoals along the Fishkill-Beacon shoreline. Characteristic plants include waterweed (*Elodea nuttallii*), coontail (*Ceratophyllum demersum*), naiad (*Najas guadalupensis*), sago pondweed (*Potamogeton pectinatus*), horned pondweed (*Zannichellia palustris*), and widgeon grass (*Ruppia maritima*). Water chestnut occupies substantial portions of this part of the river from river kilometer 93 (river mile 58) (Pollapel Island) north to about river kilometer 105 (river mile 65) (Chelsea). The **tidal zone** in the Hudson consists of sparsely vegetated intertidal shore and flats and tidal marsh communities. Because of the generally steep shoreline, deep water, and strong currents in this stretch of the river, **marshes and flats** occur only at the mouths of tributaries or in the shelter of islands where sediment can accumulate. The four major tributaries in this part of the Hudson are from south to north: **Annsville Creek, Moodna Creek, Fishkill Creek, and Wappinger Creek**. Marshes and tidal flats occur at these tributary mouths and behind **Iona Island, Constitution Island, and Con Hook**. Mudflats contain arrowheads (*Sagittaria* spp.), wild celery (*Vallisneria americana*), and mud-plantain (*Heteranthera reniformis*), as well as diverse assemblages of periphyton (attached algae) and bacteria. Freshwater mudflats found from Wappinger Creek north contain several of these species as well as mudwort (*Limosella australis*). Brackish and freshwater marshes in the Hudson can generally be divided into lower and upper marsh zones. The lower marsh generally experiences large daily fluctuations in water levels and is characterized by peltate-leaved plants (broad leaves on long stalks arising from the plant's base). Characteristic plants include spatterdock (*Nuphar advena*) in deeper water interspersed with pickerelweed (*Pontedaria cordata*), big-leaved arrowhead (*Sagittaria latifolia*), and arrow arum (*Peltandra virginica*) in shallower water. In areas with sandy substrate, common three-square bulrush (*Scirpus pungens*), water smartweeds (*Polygonum amphibium*), and bur-marigolds (*Bidens* spp.) are characteristic. The upper marsh is only partially flooded during the daily tidal cycle and is characterized by an emergent marsh community. Dominant plants are narrow-leaved cattail (*Typha angustifolia*) and the invasive common reed (*Phragmites australis*). In the wetter areas of the upper marsh, the

cattail and reed are mixed with wild rice (*Zizania aquatica*), rice cut grass (*Leersia oryzoides*), river bulrush (*Scirpus fluviatilis*), and sweet flag (*Acorus americanus*).

## **Summary**

In the event of a worst case discharge, non-persistent petroleum product could potentially flow into the Hudson River. The Hudson River is tidally influenced at New Windsor and as such, non-persistent product could travel a maximum of five miles upstream during flood tide to the point of tidal influence and five miles downstream (ebb tide) from the terminal into the Hudson River and its tributaries.

There are numerous sensitive resources near the terminal and within the study area that warrant special concern and attention. These areas may experience short-term disruption and inconvenience caused by spill response activities. Affected resources within the study area could include schools, recreational areas, conservation areas, endangered and threatened species, wetlands, cultural resources, and various modal transportation routes.



**TABLE 1**  
**Sensitive Resources Contact List**  
**Global Newburgh South Terminal**

<b>Sensitive Resource</b>	<b>Contact Name/Location</b>	<b>Contact Number</b>
Water Intakes/Authorities	New Windsor Water Department	845-563-4625
	Newburgh Water Department	845-565-3356
	Dutchess County Water and Wastewater Authority	845-229-2524
	New York City Chelsea Pump Station	914-232-5171
	Highland Water District	845-691-2400
	City of New York Delaware Water Supply	914-232-5171
	Roseton Power Station	914-486-5579
	Danskammer Power Station	845-452-2700
Schools	Horizon on the Hudson School	845-563-7373
	Newburgh School	845-561-3371
	Oblate Fathers School	845-561-0685
	Our Lady of Loretto School Garden	845-265-2594
	U.S. Military Academy – West Point	845-938-4011
	Sargent School	845-838-6930
	St. Joachim/St. John Schools	845-831-6550
	J V Forrestal School	845-838-6960
Hospitals	St. Lukes Cornwall	845-534-7711
	Craig House Center	845-831-1200
	St. Francis Hospital Turning Point	845-838-4500
Utilities (Also in Water Intakes)	Roseton Power Station	914-486-5579
	Danskammer Power Station	845-452-2700
National and State Parks	Storm King State Park	845-786-2701
	Hudson Highlands State Park	845-225-7207
Recreation Areas	Scenic Hudson operates Foundry Dock Park and Madam Brett Park	845-473-4440
	City of Beacon, Parks Department	845-831-7050
	Newburgh Parks Department	845-565-3298
	Southern Dutchess Country Club	845-831-0762
	Foundry Dock Park (operated by Scenic Hudson)	845-473-4440
Conservation Areas and Preserves	Moodna Creek Marsh, West Point Foundry Preserve, Fishkill Ridge Conservation Area (operated by Scenic Hudson)	845-473-4440
	Constitution Marsh Sanctuary	914-265-2601
Cultural and Archeological Resources	Bannerman's Island Arsenal	845-831-6346
	New York State Historic Preservation Officer	518-474-0443
Businesses/Economic Resources	West Shore Marine	914-236-4483
	Cornwall Yacht Club	845-534-8835
	Gull Harbour Marina	845-561-2637
	Dutchess Boat Club of Beacon	845-831-6220
	Newburgh Yacht Club/Marine	845-565-3920
	Chelsea Yacht Club/Marina	845-831-9802
	Global Newburgh Terminal	845-565-0463
	Global Newburgh Cargo and South Terminals	845-562-0567

## SPILL CONTAINMENT STRATEGIES

Appropriate containment actions depend upon the spill location and environmental conditions at the time of release. The initial containment actions prescribed are to be implemented regardless of the spill volume and rate. After initial assessment of the spill situation, containment procedures should be modified.

### On Land Response

**Containment:** Spill containment and recovery on land (in soils) should immediately begin to prevent oil from reaching a watercourse or groundwater. Containment on land is typically less dynamic than containment on water. The rate of oil penetration through soil is typically dependent on both the type of oil and soil. The combination of low viscosity oil travelling through coarse gravel provides the quickest penetration rate. In homogenous soil, maximum penetration occurs where pools of oil form on the surface. Pooled oil creates a pressure head, which encourages oil penetration.

Groundwater movement is very slow; often between 1.5 feet and 5 feet per day, allowing time to study the geology of the underlying strata and determine the best location for oil recovery. Primary on land containment strategies are focused to achieve the following objectives for spill surface containment.

#### Impermeable ground surfaces:

- Block inlets to drains, sewage systems, pipe and cable ducts to prevent explosion risk or contamination of sewage treatment plants and/or watercourses.
- Concentrate oil for collection.

#### Bounded (bermed) areas:

- Consider introduction of water layer under oil layer in unlined dikes to reduce rate of soil penetration. Block all inlets.
- Collect oil from the dikes area using recovery systems or via oil water separators if allowable.

#### Unbounded (unbermed) areas:

- Block all inlets.
- Collect oil from puddles to prevent deep oil penetration on over saturated spots.
- Spread sorbents to increase the sorption capacity of the surface layers.
- Bulldoze or excavate free oil and oil saturated soil to the next natural or artificial impermeable surface.

Containment, by building berms or dams, can be achieved using readily available material and is important if the oil is to be pumped/vacuumed for collection. This method should not be used when oil is on highly permeable soil, as concentrating the oil will increase the speed at which the oil reaches groundwater. Containment on less permeable soil may decrease the amount of contaminated soil and reduce the response time.

Intercepting the horizontal movement of spilled oil can be achieved by constructing a trench across the migration path. The interceptor trench method should be used only if the water table is less than 10 feet below the ground surface. Oil movement is typically intercepted when the bottom of the trench is about 3 feet below where the water table stabilizes. General contractors with commercially available equipment can easily construct spill interceptor trenches. Hydrologists should optimize the location of the interceptor trench through investigation and sampling prior to constructing the trench. The trench interceptor method is not recommended in rocky soils.

### **Recovery Techniques:**

**Excavation:** The purpose of excavation is to remove oil saturated soil and prevent contamination of the groundwater. Contaminated soil is removed mechanically using excavators and trucks. Early and successful excavation to prevent the oil from reaching groundwater may reduce long-term recovery operations. Excavation may be effective when used to recover high viscosity oils. If during excavation the impermeable natural layers are disturbed, oil may penetrate further into the soil. When volatile products such as gasoline are involved, fire and health hazards may develop. The following points should be evaluated when considering excavation as a recovery technique:

## SPILL CONTAINMENT STRATEGIES

- If an impermeable layer (natural or otherwise) which forms a barrier for the groundwater could be disturbed or penetrated, excavation should not be used.
- Large spills may require an alternative recovery method as excavation may cause further damage at increased costs.
- If the groundwater is contaminated or not endangered, excavation should not be used.
- Disposal of contaminated soils resulting from excavation activities may be difficult and/or expensive.

**Vacuum Systems/Pumps:** Oil is vacuumed or pumped off surfaces. Recovery can be enhanced by flushing the oil with water into areas where the oil can be more effectively recovered within the spill site. Final removal of oil on impermeable surfaces is achieved with sorbents. On permeable surfaces, soil remediation or collection may be required.

**Recovery Pump Systems:** The purpose of a recovery pump system is to remove oil from the water table. A variety of techniques, ranging from simple to complex, are available. Time involved in utilizing these techniques is far greater than those techniques used for cleaning up surface spills. Since the rate of oil movement is much slower, sufficient time should exist for a detailed hydrological study to be performed to optimize recovery techniques.

Each of the recovery pump system techniques may utilize excavators, prefabricated perforated concrete rings or filter pipes for the sump shaft, submersible pumps with level controls, oil skimmers, oil/water separators, coarse gravel or slag for backfilling, power supplies, and sufficient piping/hoses. Ditches are used to increase the rate of oil recovery. Sump shafts are built by stacking concrete rings in the hole. Pumps and skimmers are deployed when there is enough water and oil to warrant their use. Excavations are typically backfilled with gravel and covered with excavated soil to satisfy constructability and safety concerns. The following points should be evaluated when considering the use of a recovery pump system.

- Ditches should not penetrate the undisturbed water table by more than 80 to 100 cm.
- The level controls of the pumps should be sensitive enough to form a constant depression of the water table.
- Oil/water separators should be constructed to allow the maximum residence time in order to minimize the oil concentrations in the discharged water.
- Water re-injection may have a flushing effect improving recovery rates.
- Cold weather conditions may require heated pipes to prevent icing and keep the oil flowing.

### On Water Response (Moving)

**Containment:** Spill containment and recovery on moving water (rivers, streams, creeks, ponds and lakes) often present challenges to a spill responder. In flowing waters, petroleum products can be transported miles downstream in a matter of hours. As a result, response actions must be implemented quickly to limit spread of the product. Booming strategies are most commonly used to respond to an on water spill. Additional containment techniques include building a dam (i.e. earth, straw barrier, wood, and spade with water discharge), weir and oil retaining barrier, or a net barrier to collect sorbent materials.

Booming strategies achieve the following objectives:

- Containment: contain and collect oil at preselected sites along the river bank;
- Diversion: divert oil from sensitive areas to help protect them, and
- Exclusion: protect inlets, landings, stream mouths, and other sources.

## SPILL CONTAINMENT STRATEGIES

### **Booming Techniques**

**Containment Booming:** Containment booming involves the use of booms to prevent an oil spill from advancing downstream. Containment booming concentrates the oil at a prepared site for collection. Boom deployment should be performed at an angle, with the leading edge towards the approaching slick to collect all, or a portion, of the oil against the boom. The angle of boom deployment should be proportional to the current river speed. As the velocity of the river and boom length increase, the deployment angle relative to the shoreline decreases. Spill responders should achieve the greatest angle of boom deployment possible without causing entrapment of the oil under the boom or failure of the boom itself. To improve stability, the boom must be anchored in several places. The use of an intermittent buoy between boom and anchor helps to prevent submersion of the boom at anchoring points. It is important that the deployed boom be checked periodically along its length for leakage and twisting. It may be necessary to modify the angle of boom deployment from time to time to accommodate changes in the waterbody. With fast currents, successive booms may be placed at increasingly greater angles to reduce surface turbulence with each leading boom. In addition, shoreline protection booms may need to be deployed to protect the shoreline from oiling if it has not already been contaminated (See Section 6.0 in the Global Facility Response Plan).

**Diversion Booming:** Diversion boom is deployed at an angle to the approaching slick. Oil is diverted away from a sensitive area or to a less sensitive area for recovery. Diversion booming is typically used on inland streams where currents are greater than 1.6 feet per second; inlets; and river or creek mouths. Diversion boom can be cascaded to reach farther out into the water body. The leading end of the boom is anchored to the shoreline just up current from the deflection area. A vessel then angles the trailing end down current and away from the shoreline. The trailing end can be anchored in place or maintained with the vessel allowing periodic adjustments for changes in wind speed, currents, or oil loading. If the boom is to be anchored in place, multiple anchors should be considered to maintain boom shape and integrity. The angle between the shore and the boom must be smaller in faster currents. The use of an intermittent buoy between boom sections and anchors help to prevent submersion of the boom at anchoring points. It is imperative that the deployed boom be checked periodically along its length for leakage and twisting.

**Exclusion Booming:** Exclusion booming involves boom deployment across small inlets, streams, or creek mouths, where currents are less than 1.6 feet per second to exclude oil from the area. This technique requires deployment of boom in a static mode, placing or anchoring the boom between two or more stationary points. In many cases, the deployment of a secondary boom behind the primary boom is desirable to contain oil that may spill under or over the primary boom. The secondary boom can be either a containment or sorbent boom. It is sometimes necessary to use containment boom as an exclusion device to prevent an oil spill from contaminating important areas or environmentally sensitive zones such as tidal estuaries, intertidal spawning habitats, shellfish beaches, and salt marshes.

**General Information:** The specific manpower and equipment requirements for boom deployment depends on the size of the approaching slick and the current velocity. Boom deployed at small angles in fast currents requires greater boom lengths to cover the same width as those deployed at greater angles in fast currents. Table 2 summarizes the logistical requirements for single containment booming with a 50-foot deflection and a velocity of 2.5 feet per second. Current speed and the sensitivity of the riverbanks near the collection point limit containment booming.

**TABLE 2**  
**Summary of Protection Techniques**

Protection Technique	Description	Primary Logistical Requirement	Limitations
Containment	Boom is deployed from the shoreline at an angle towards the approaching slick and anchored or held in place with a work boat. Oil is diverted towards the shoreline for recovery.	Single Boom, 2.5 ft/s current Boom - 200 ft. Boats - 1 (for deep water) Personnel - boat crew +3 Miscellaneous - 3 anchors, line, buoys, and recovery unit	Currents > 3.2 ft/s
Deflection/ Diversion	Boom is deployed from the shoreline away from the approaching slick and anchored or held in place with a work boat. Oil is deflected away from the shoreline.	Single Boom, 1.5 ft/s current Boom - 200 ft Boats - 1 (for deep water) Personnel - boat crew +3 Miscellaneous - 3 anchors, line, buoys, and recovery unit	Currents > 3.2 ft/s
Exclusion	Boom is deployed across or around sensitive areas and anchored in place. Approaching oil is deflected or contained by boom.	Per 1,000 ft of Boom Boats - 1 (for deep water) Personnel - boat crew +3 Miscellaneous - 6 anchors, line, buoys, and recovery unit	Currents > 1.5 ft/s Water depth > 65 ft

Dam construction is an effective technique in small streams where shallow channels and weak currents prevail. Constructing dams to block or divert a channel may be the quickest and most effective technique to contain and recover a spill, provided the equipment and material are readily available.

**Recovery Techniques:** Oil removal techniques on moving water should be used in conjunction with containment methods. The major part of the oil should be removed while it is still suitable for skimming devices and vacuum pumps to be utilized. Second stage operations include using sorbents for the remaining oil, which may be too thin for effective mechanical recovery. Oil skimmers are typically grouped into five categories: oleophilic, weirs, vacuum, hydrodynamic, and others.

### **On Water (Static)**

Some water bodies such as lakes are classified as static, as they have no currents. These static water bodies can have surface waves from wind. Under the influence of wind, oil will drift over the water. Boom can be used to collect oil utilizing the same methods as in moving water. In conditions where the water is truly static, it may be necessary to tow boom slowly across the water to collect the oil. Once the oil is contained, the moving water recovery methods can be used. If boats are not available, it may be possible to use a jet of water or current of air to push or deflect the oil on the water. It is imperative that turbulence to the oil is not caused, as emulsification and dispersion may occur.

### **Effects of Ice and Snow**

Spills on ice: The purpose of under ice oil spill containment and collection is to prevent the spread of oil and allow recovery prior to thawing. Oil can be recovered by cutting trenches through the ice and removing the oil that gathers in the trenches with pumps, skimmers, vacuums, and sorbents. Core holes should be drilled to assist in locating the oil spill under the ice. Oiled ice may be manually or physically recovered for subsequent melting and recovery.

## SPILL CONTAINMENT STRATEGIES

Spills on land during winter: In cold weather conditions, frozen ground is impervious to oil. Oil will tend to gather at the lowest point of the affected frozen area. Temporary berms can be made of snow and ice. The cold temperatures increase the oil's viscosity, which reduces the spread of oil. Contaminated snow must be collected for melting and disposal.

### Containment Strategies

Containment and protection strategies are highly dependent on the conditions at the time of a spill. The containment strategies described within this document are for the general conditions at the site based on the planning distance calculations as outlined in Section 1.4.2 of 40 CFR 112. The best approach to spill response must be decided by the Incident Commander after consideration of the health and safety of personnel, specific environmental conditions in the area of spill, volume of spill, and the elapsed time since the spill.

The sensitive resource maps (Figures 2 through 4) depict suggested locations along the anticipated spill flow path where containment, diversion, and exclusion booming strategies may be implemented. A square enclosing the letter P and sequence number depict selected containment and protection locations. The protection/containment generic strategy for each location is described in Table 3. These generic strategies were developed without a site visit. Information considered during the development included what was identified during the Vulnerability Analysis and found on USGS maps. These generic strategies do not take into account variations in the stream from vegetation, sediment, climate, or wildlife, or include considerations or response actions. All response equipment should be utilized in accordance. As the course of a waterway or area around the facility changes, it may be necessary for these generic strategies to be revisited.

**Table 3**  
**Containment Strategies and Logistics**

Site	Site Description	Strategy	Equipment	Travel Distance and Response Time <sup>(1)</sup>	Discussion <sup>(2)</sup>
<b>Immediate Area</b>					
P1	Outfalls including storm drains	On land response / Diversion	Shovels Sandbags Sorbent Hand tools	Not Applicable	Close off storm drains and oil/water separator. Use shovels to fill sandbags and build berms to surround intakes and exits to storm sewers as needed. Lay sorbents around berms.
P2	Neighboring piers and docks	Diversion	1000ft boom 6 anchors 2 Weir type skimmers 1 vacuum truck sorbents	Adjacent	Place a boom from dock area in a northeast direction to divert product from piers and docks.
P3	Quassaick Creek	Exclusion	Light containment Hard boom Sorbent boom Light marine craft Portable storage	500 feet north	Deploy exclusion boom across mouth of creek to prevent entry
P4	Denning Point Area	Exclusion	1000ft boom 6 anchors	1.15 miles east northeast	Install an angled diversion boom from the southern end of Denning Point, northwest into Hudson River.
P5	Fishkill Creek	Exclusion	Light containment Hard boom Sorbent boom Light marine craft Portable Strg	1.4 miles east northeast	Deploy exclusion boom across mouth of creek to prevent entry
<b>Incoming Tide</b>					
P6	Beacon Harbor Area via Beacon Boat Club	Containment/ Collection	1000ft boom 6 anchors 2 Weir type skimmers 1 vacuum truck sorbents	2.10 miles northeast	Deploy boom in a double chevron pattern to collect product. As tide turns, reverse the direction of the chevrons as required.
P13	South of I-84 Bridge via Newburgh Yacht Club	Containment and Collection	1000ft boom 6 anchors 2 Weir type skimmers 1 vacuum truck sorbents	1.70 miles north	Deploy boom in a double chevron pattern to collect product. As tide turns, reverse the direction of the chevrons as required.
P14	Brockway Area	Exclusion	500ft boom 8 anchors	2.25 miles northeast	Place a boom from the south to the northwest to deflect product towards the western shoreline.
P16	South of Roseton	Diversion/ Collection	1000ft boom 6 anchors 2 Weir type skimmers 1 vacuum truck sorbents	4.90 miles north	Angle boom from point to the southeast for diversion and collection.

**Table 3**  
**Containment Strategies and Logistics**

Site	Site Description	Strategy	Equipment	Travel Distance and Response Time <sup>(1)</sup>	Discussion <sup>(2)</sup>
P17	Chelsea Area	Diversion/Collection	1000ft boom 6 anchors 2 Weir type skimmers 1 vacuum truck sorbents	5 miles northeast	Place a boom from the south to the northwest for diversion and collection.
<b>Outgoing Tide</b>					
P7	Pollepei Island	Containment and Collection	1000ft boom 6 anchors 2 Weir type skimmers 1 vacuum truck sorbents	2.65 miles south southeast	Deploy first boom from the island southwest into the Hudson River. Deploy second boom in a single chevron pattern to collect product.
P8	Moodna Marsh	Exclusion	1000ft boom 6 anchors	2.8 miles south	Deploy exclusion boom across mouth of creek to prevent entry
P9	Moodna Creek	Exclusion	1000ft boom 6 anchors	2.8 miles south	Install an angled diversion boom from the southern end of Sloop Hill, southeast into Hudson River.
P10	Cornwall Landing via Cornwall Yacht Club	Containment and Collection	1000ft boom 6 anchors 2 Weir type skimmers 1 vacuum truck sorbents	3.75 miles south	Deploy boom in a double chevron pattern to collect product. As tide turns, reverse the direction of the chevrons as required.
P11	Foundry Cove	Diversion	5000ft boom Light marine craft Portable storage 612 anchors 2 Weir type skimmers 1 vacuum truck sorbents	5.0 miles south	Deploy exclusion boom across inlet to prevent entry
P12	South of Little Stony Point	Exclusion	1000ft boom 6 anchors	4.55 miles southeast	Install an angled diversion boom from the southern end of Little Stony Point, northwest into Hudson River.

(1) Travel time to each P-site and the velocity of tidal movements could not be determined. The travel time will vary depending on tide, wind, and wave action.

(2) Tentative Planning for all spill scenarios:

Determine when ebb tide will begin. At slack tide, place additional boom around the spill in the areas where it has accumulated, either against the installed containment boom or against the shoreline where it has been directed. This will act to reduce the spread and impact of the spill. Continue to remove the accumulated oil.

Position spill response equipment at the point where the angled diversion booms come ashore (3-1000 ft. booms, 30 anchors, 6 Weir type skimmers, 8 vacuum trucks, sorbents).



## SPILL POTENTIAL ANALYSIS

Spill prevention is the best method to protect the environment, public, Global personnel and assets, and public property against the threat of a spill. This goal is achieved through personnel training, adherence to proper operational and safety procedures, and sound engineering practices.

The lack of spills (FRP 3.8) at this facility shows that the prevention, containment, and detection systems in place at the facility have been effective.

Specific steps taken by the facility to minimize the potential for a spill can be found in the following sections of this Plan:

Section 3.1	Tanks and Surface Impoundments
Section 3.2	Containment Volume Analysis
Section 3.3	Thruput Variability Analysis
Section 3.4	Receipt/Delivery Hazard Evaluation
Section 3.5	Facility Operations Hazard Evaluation
Section 3.6	Vulnerability Analysis to identify protection of sensitive environments and wildlife
Section 5.0	Discharge Detection Systems
Section 7.0	Facility Self-Inspection
Section 8.0	Training and Drills
Section 10.0	Facility Security System

### **Horizontal Range of a Potential Spill**

The terminal is situated in New Windsor, New York on the western shore of the Hudson River. Spills in the tank farms would be contained within containment areas. Spills in the terminal yard would be directed to the site retention pond. Spills in transfer areas would be directed to one of the two facility oil water separators.

In the event of a worst case discharge, non-persistent petroleum product could potentially flow from the terminal grounds into the Hudson River. Some product would likely flow into the terminal's oil water separator system and into the Hudson River if tank farm water was being discharged at the time. Finally, if an overflow occurred at the loading rack and could not be contained in drainage and containment system it would be discharged to the facility retention pond.

See the tank chart in section 3.1 for a list tanks. All tanks are being inspected according to API 653. Facility personnel also perform daily walk around inspections (see FRP Section 7 for the tank inspection requirements by the facility).

**See the Spill Risk Probability Matrix on the following page identifying potential natural disasters as hurricanes and earthquakes.**

### SPILL RISK PROBABILITY MATRIX

Location	Product	Quantity	Probability	Likely Consequence	Impact
Tank Field Transfer	Gas/Ethanol/Diesel/Heating Oil	<500 barrels	Medium	Contained in diked area	Moderate
Tank Field Transfer	Gas/Ethanol/Diesel/Heating Oil	>500 barrels <20 kB	Low	Contained in diked area	Moderate
Tank Field Transfer	Gas/Ethanol/Diesel/Heating Oil	>20,000 bbls	Low	Worst Case Discharge	Substantial
Tank Field Transfer	Additive	<100 gallons	Medium	Contained in impermeable area	Slight
Tank Field Transfer	Additive	>100 gallons	Low	Contained in impermeable area	Slight
<b>Tank Field Earthquake</b>	Gas/Ethanol/Diesel/Heating Oil	>20,000 bbls	Low	Worst Case Discharge	Substantial
<b>Hurricane</b>	Gas/Ethanol/Diesel/Heating Oil	>20,000 bbls	Low	Worst Case Discharge	Substantial
Pump Pad	Gas/Ethanol/Diesel/Heating Oil	<500 gallons	High	Contained in impermeable area	Slight
Pump Pad	Gas/Ethanol/Diesel/Heating Oil	>500 gallons	Low	Spilled to ground	Slight
Truck accident on-site	Gas/Ethanol/Diesel/Heating Oil	<5000 gals	Low	Spilled to ground	Moderate
Marine Loading	Gas/Ethanol/Diesel/Heating Oil	>1000 bbls	Low	WCD/spill to navigable water	Substantial

**FACILITY SPILL HISTORY**

There have been no spills to water from the Global Newburgh South Terminal. Any reportable spills from this facility prior to June 2010 are the responsibility of former owners and table below lists spills associated with Global's operations.

Any future discharges to water will include the date of discharge, how the spill was detected, cause of discharge, material discharged, amount of discharge (gal), amount of discharge reaching navigable waters, effectiveness and Capacity of Secondary Containment, Cleanup actions taken, steps to reduce reoccurrence, capacity of source of discharge, enforcement action, and effectiveness of monitoring equipment

**FACILITY SPILL HISTORY**

<b>Date</b>	<b>Product</b>	<b>Quantity</b>	<b>Source</b>	<b>Comments* See Notes</b>

Comments include (a) Detection Method, (b) amount of discharge reaching water, (c) Effectiveness & Capacity of Secondary Containment (d) total oil storage of tank(s); (e) enforcement actions and (f) effectiveness of monitoring (g) cleanup actions taken; (h) steps taken to reduce reoccurrence

#### **4.1**

#### **DISCHARGE SCENARIO DEVELOPMENT**

Spill response scenarios provide emergency responses to hypothetical emergency situations. Scenarios are designed to give team members an opportunity to practice their skills. While useful as a planning and training tool, scenarios are not intended as outlines of expected spill responses; nor can they be regarded as predictions or performance guarantees. An actual response must always be tailored to meet actual circumstances. Emergency Plans for spill response are outlined in Section 2.0 and Section 7.1 of the ERAP, the ability to implement the plan are demonstrated through the drill and exercise program in Section 8.0 and actual spill response events.

- An EPA defined small discharge is a spill of 2,100 gallons or less.
- USCG Average Most Probable Discharge (AMPD) is defined as the lesser of 50 barrels or 1% of WCD. The **USCG WCD is 1854 barrels so 1% of that amount (18.5 barrels) is the AMPD.**

#### 1. LOADING AND UNLOADING OF SURFACE TRANSPORTATION

**Scenario:** A small discharge will most likely come from the area of the Vehicle Loading Rack. The product release will most likely be due to vehicle over-filling or malfunction of over-fill protection equipment.

**Response:** If an overfill occurred during truck loading the spilled product would contact the concrete pad beneath the loading rack and flow into the perimeter rack drains. From the drains it would flow to the oil water separator which discharges to an air stripper and then to the on site retention pond. Flow from the pond to the Hudson River is manually controlled by valves and pumps.

#### 2. FACILITY MAINTENANCE

**Scenario:** Facility maintenance could potentially cause a small spill of a gallon or so at a time. Maintenance is typically conducted in a diked area with drip pans to catch any oil from the activities.

**Response:** Stop the flow of product, place booms around drains and use absorbent pads to absorb any product.

#### 3. FACILITY PIPING

**Scenario:** The most likely cause of a small spill would be a release from piping during routine maintenance. In most causes, a spill of this nature would be contained within secondary containment.

**Response:** For a spill outside containment or any portion of the spill that escaped secondary containment from an open valve would likely travel in an east or south direction toward the storm water retention pond and the areas adjacent to it. Response would be the same as #2 above and in the ERAP Section 8 and on the corresponding response maps.

#### 4. PUMPING STATIONS AND SUMPS

**Scenario:** Failure of a pump seal could occur at the pumping station. Most likely the release will be small (less than 100 gallons) and maintained in the secondary containment.

**Response:** Any portion of the spill that escaped secondary containment from an open valve would likely be captured within the diesel loading area or travel in an east or south direction toward the storm retention pond and the areas adjacent to it.. Response would be the same as #2 above and in the ERAP Section 8 and on the corresponding response maps.

#### 5. OIL STORAGE TANKS

**Scenario:** Release of product from an oil storage tank may be caused by a complete rupture or a leak. If a leak, product will be contained in the secondary containment system (which is designed to hold 110% of the largest tank's contents and any precipitation).

**Response:** Any release from a tank that escaped secondary containment would likely travel in an east or southerly direction toward the storm water retention basin and the areas adjacent to it. Response is outlined in the ERAP Section 8 and on the corresponding response maps.

#### 6. VEHICLE REFUELING

**Scenario:** Vehicles refuel at the self use diesel dispenser located west of the loading rack. The product release will most likely be due to vehicle over-filling. The spilled product would enter a drain which discharges to an oil/water separator and then to the onsite retention pond. therefore, the scenario and response will be identical to #1 Loading and Unloading of Surface Transportation (above).

#### 7. AGE AND CONDITION OF FACILITY AND COMPONENTS

**Scenario:** Due to the maintenance program at the facility (i.e. API 653), the age of the facility and its components will not significantly affect the likelihood of an incident. Therefore, there will not be a separate scenario for the different ages and condition of the facility and components. (See FRP 3.1 for tank ages).

**Response:** Response will not vary from above detailed responses and the ERAP Section 8.

## Factors Affecting Response Efforts for Small Discharge Scenarios

**Proximity to downgradient wells, waterways, and drinking water intakes:** The terminal is located along the Hudson River. There are three water intakes along the river to the northeast of the terminal. outside of the planning distance (5 miles)

**Remediation equipment:** Available through OSROs and through local contractors.

**Probability of a chain reaction of failures and spills:** Unlikely due to the nature of the petroleum storage.

**Type and Location of Material Discharged** – Materials stored at the facility include gasolines, light diesel fuels, home heating oils. The light diesel fuels (kero-jet fuels and light home heating oils) may be flammable when fresh. These oils are identified as high fluidity, clarity, rapid spreading rate, strong odor, and high evaporation rate. They do not tend to adhere to surfaces and can largely be removed by flushing. The gasolines are flammable when in sufficient concentration. Gasolines tend to evaporate quickly and entirely. Due to the very low flash point and high volatility, containment and removal activities may be limited to maintaining a safety zone around the spill area to eliminate any source of ignition. Any environmental or economic sensitive areas that could be affected by a gasoline spill may require exclusion booming. This booming must be performed well ahead of the arrival of the spill to ensure that the vessels towing the exclusion boom are not required to come in contact with the spilled product. Diesel fuels evaporate more slowly than gasolines. The Flash Point of these products is generally over 100 degrees F. This would permit containment and removal activities as the danger of igniting the spill is much lower. In higher wave action areas, these oils may form unstable emulsions. Discharges to concrete or asphalt will require containment to prevent migration to surface water pathways until recovery operations can be completed. Discharges to soil may permeate soil if outside of containment area and will require excavation and or additional assessment to fully characterize impacts. Some oils may tend to penetrate porous surfaces, requiring more extensive cleanup activities if the oils impact a shore area. Light oils are considered toxic.

**Weather or Aquatic Conditions** – If the weather is hot, more of the spilled product will evaporate, and the spill will likely not travel as far offsite. If the weather is rainy, the product will likely travel further than in dry weather. If the product is diesel or fuel oil, less will evaporate and the spill may therefore travel further, especially during moderate temperatures. Conversely, in cold weather, heavier products may flow less freely.

**Probability of a Chain Reaction of Failures** - The probability of a chain reaction of failures and spills is unlikely due to the nature of petroleum storage.

**Direction of Spill Pathway** - If product escapes secondary containment, it will follow the natural gradient of the facility into the Hudson River. See Table 3 in ERAP and ERAP Section 8 for detailed direction of spill pathway.

### **Response Resources** – Small Discharge

- 1,000 ft of containment boom and a means of deploying boom will be provided within 1 hour of discovery. *Available from terminal stockpile and local OSROs listed in the ERAP Section 4.*
- Oil recovery devices within an effective daily capacity equal to amount of oil discharged available within two (2) hours of spill discovery. *Available from local OSROs listed in the ERAP Section 4.*
- Temporary oil storage capacity for recovered oily material equal to twice the effective daily recovery capacity. *Able to use unused tank capacity onsite, or mobile containers.*
- **Immediate Response Actions** - See ERAP Section 7.
- **Notifications** - See ERAP Section 2.
- **Sensitive Resources at Risk** - See Vulnerability Analysis in FRP Section 3.6.
- **Containment Strategies** - See Table 3 labeled "Containment Strategy and Logistics" and the corresponding sensitive resource maps located in the ERAP Section 8. The table describes containment and protection locations during ebb and flood tide. The letter "P" and the sequence number depict selected containment and protection locations. Distance from the terminal to the "P" site is included as well as estimated maximum

response time from initial spill to intercept leading edge of slick. **Response Actions will be consistent with those outlined in the NY/NJ ACP.**

- EPA medium discharge is defined as 36,000 gallons or less.
- USCG Maximum Most Probable Discharge (MMPD) is the lesser of 1,200 barrels or 10% of the WCD. **The USCG WCD is 1854 barrels so 10% of that amount (185 barrels) is the MMPD.**

#### 1. LOADING AND UNLOADING OF SURFACE TRANSPORTATION

**Scenario:** A medium discharge will most likely come from the area of the Vehicle Loading Rack. The product release will most likely be due to vehicle over-filling or malfunction of over-fill protection equipment.

**Response:** If an overfill occurred during truck loading the spilled product would contact the concrete pad beneath the loading rack and flow into the perimeter rack drains. From the drains it would flow to the oil water separator which discharges to an air stripper and then to the on site retention pond. Flow from the pond to the Hudson River is manually controlled by valves and pumps.

#### 2. FACILITY MAINTENANCE

**Scenario:** Facility maintenance could potentially cause a small spill of a gallon or so at a time. Maintenance is typically conducted in a diked area with drip pans to catch any oil from the activities.

**Response:** Stop flow of product, place booms around drains and use absorbent pads to absorb any product.

#### 3. FACILITY PIPING

**Scenario:** The most likely cause of a medium spill would be a release from piping during routine maintenance. In most cases, a spill of this nature would be contained within secondary containment.

**Response:** For a spill outside containment or any portion of the spill that escaped secondary containment from an open valve would likely travel in an east or south direction toward the storm water retention pond and the areas adjacent to it. Response would be the same as #2 above and in the ERAP Section 8 and on the corresponding response maps.

#### 4. PUMPING STATIONS AND SUMPS

**Scenario:** Failure of a pump seal could occur at the pumping station. It is highly unlikely that this type of spill would constitute a Medium Discharge volume..

**Response:** Any portion of the spill that escaped secondary containment from an open valve would likely travel in an east or south direction toward the storm water retention pond and the areas adjacent to it. Response would be the same as #2 above and in the ERAP Section 8 and on the corresponding response maps.

#### 5. OIL STORAGE TANKS

**Scenario:** Release of product from an oil storage tank may be caused by a complete rupture or a leak. If a leak, product will be contained in the secondary containment system (which is designed to hold 110% of the largest tank's contents and any precipitation).

**Response:** Any release from a tank that escaped secondary containment would likely travel in an east or southerly direction toward the storm water retention basin and the areas adjacent to it. Response is outlined in the ERAP Section 8 and on the corresponding response maps.

#### 6. VEHICLE REFUELING

**Scenario:** Vehicles refuel at the self use diesel dispenser located west of the loading rack. The product release will most likely be due to vehicle over-filling and is unlikely to constitute a Medium Discharge volume. The spilled product would enter a drain which discharges to an oil/water separator and then to the onsite retention pond. Therefore, the scenario and response will be identical to #1 Loading and Unloading of Surface Transportation (above).

#### 7. AGE AND CONDITION OF FACILITY AND COMPONENTS

**Scenario:** Due to the maintenance program at the facility (i.e. API 653), the age of the facility and its components will not significantly affect the likelihood of an incident. Therefore, there will not be a separate scenario for the different ages and condition of the facility and components. (See FRP 3.1 for tank ages).

**Response:** Response will not vary from above detailed responses and the ERAP Section 8.



## **FACTORS AFFECTING RESPONSE EFFORTS FOR MEDIUM DISCHARGE SCENARIOS**

**Proximity to downgradient wells, waterways, and drinking water intakes:** The terminal is located along the Hudson River. There are three water intakes along the river to the northeast of the terminal outside of the planning distance (5 miles)

**Remediation equipment:** Available through OSROs and through local contractors.

**Probability of a chain reaction of failures and spills:** Unlikely due to the nature of the petroleum storage.

**Type and Location of Material Discharged** – Materials stored at the facility include gasolines, light diesel fuels, home heating oils. The light diesel fuels (kero-jet fuels and light home heating oils) may be flammable when fresh. These oils are identified as high fluidity, clarity, rapid spreading rate, strong odor, and high evaporation rate. They do not tend to adhere to surfaces and can largely be removed by flushing. The **gasolines** are flammable when in sufficient concentration. Gasolines tend to evaporate quickly and entirely. Due to the very low flash point and high volatility, containment and removal activities may be limited to maintaining a safety zone around the spill area to eliminate any source of ignition. Any environmental or economic sensitive areas that could be affected by a gasoline spill may require exclusion booming. This booming must be performed well ahead of the arrival of the spill to ensure that the vessels towing the exclusion boom are not required to come in contact with the spilled product. **Diesel fuels** evaporate more slowly than gasolines. The Flash Point of these products is generally over 100 degrees F. This would permit containment and removal activities as the danger of igniting the spill is much lower. In higher wave action areas, these oils may form unstable emulsions. Discharges to concrete or asphalt will require containment to prevent migration to surface water pathways until recovery operations can be completed. Discharges to soil may permeate soil if outside of containment area and will require excavation and or additional assessment to fully characterize impacts. Some oils may tend to penetrate porous surfaces, requiring more extensive cleanup activities if the oils impact a shore area. Light oils are considered toxic.

**Weather or Aquatic Conditions** – If the weather is hot, more of the spilled product will evaporate, and the spill will likely not travel as far offsite. If the weather is rainy, the product will likely travel further than in dry weather. If the product is diesel or fuel oil, less will evaporate and the spill may therefore travel further, especially during moderate temperatures. Conversely, in cold weather, heavier products may flow less freely.

**Probability of a Chain Reaction of Failures** - The probability of a chain reaction of failures and spills is unlikely due to the nature of petroleum storage.

**Direction of Spill Pathway** - If product escapes secondary containment, it will follow the natural gradient of the facility into the Hudson River. See Table 3 in ERAP and ERAP Section 8 for detailed direction of spill pathway.

### **Response Resources – Medium Discharge**

- Sufficient quantities of boom for oil containment/collection and for protection of fish/wildlife and sensitive environments. *Available from local OSRO.*
- Oil recovery devices to meet available medium discharge volume planning criteria, able to arrive within 12 hours of discovery. *Available from local OSRO.*
- Oil recovery devices with an effective daily capacity equal to 50% of planning volume (18,000 gallons). *Available from local OSRO.*
- Temporary oil storage capacity for recovered oily material equal to twice the effective daily recovery capacity (36,000 gallons). *Able to utilize unused tank capacity onsite, and or mobile containers.*
- **Immediate response actions** - See ERAP Section 7.
- **Notifications** - See ERAP Section 2.
- **Sensitive Resources at Risk** - See Vulnerability Analysis in FRP Section 3.6.
- **Containment Strategies** - See Table 3 labeled "Containment Strategy and Logistics" and the corresponding sensitive resource maps located in the ERAP Section 8. The table describes containment and protection

locations during ebb and flood tide. The letter "P" and the sequence number depict selected containment and protection locations. Distance from the terminal to the "P" site is included as well as estimated maximum response time from initial spill to intercept leading edge of slick.

**Response Actions will be consistent with those outlined in the NY/NJ ACP.**

#### 4.4

#### WORST CASE DISCHARGE

The EPA WCD for this facility is 2,153,760 gallons, which is the maximum capacity of the largest single tank (Tank 26). The facility oil storage tanks are not designed, installed, and/or operated in such a manner that the multiple tanks function as one storage unit.

The USCG WCD is 1854 barrels (Gasoline/Fuel Oil)

The calculation of the worst case discharge is in accordance with EPA and USCG regulations. See Appendix F for calculations

The most probable cause of a worst case discharge is total storage tank failure. This would most likely be the result of adverse weather conditions.

If the weather is hot, more of the spilled product will evaporate, and the spill will likely not travel as far off-site. If the weather is rainy, the product will likely travel further than in dry weather. If the product spilled is diesel or fuel oil, less will evaporate, and the spill may, therefore, travel further, especially during moderate temperatures. In cold weather, heavier products may flow less freely.

**The Worst Case Discharge planning calculations are included in Appendix F of this Plan.**

##### **Equipment Resources:**

- Sufficient quantities of boom for oil containment/collection for protection of wildlife and sensitive environments are supplied by ORSO certified contractors.
- Response resources with fire fighting capabilities will be the local fire department.
- The QI is the individual who will work with the fire department.
- Location of response resources for each planning tier will be supplied by the OSRO certified contractors.
- OSRO has approximately 20 percent of equipment specified to be capable of functioning in shallow water less than or equal to 6 feet in depth.
- Effective daily recovery capacities will reflect the capacity of the response.
- Temporary Storage equal to twice the daily recovery capacity will be provided by OSROs and by utilizing unused on-site storage tankage.

**Immediate response actions** - See ERAP Section 7.

**Notifications** - See ERAP Section 2.

**Sensitive Resources at Risk** - See Vulnerability Analysis in FRP Section 3.6

**Containment Strategies** - See Table 3 labeled "Containment Strategy and Logistics" and the corresponding sensitive resource maps located in the ERAP Section 8. The table describes containment and protection locations during ebb and flood tide.

The letter "P" and the sequence number depict selected containment and protection locations. Distance from the terminal to the "P" site is included as well as estimated maximum response time from initial spill to intercept leading edge of slick.

**Response Actions will be consistent with those outlined in the NY/NJ ACP.**

**RESPONSE ACTION ANALYSIS**

A critique following an oil spill response is beneficial to evaluate the actions taken or omitted. Recommendations and modifications should be made to prepare for the possibility of another oil spill. Listed below are items a team composed of outside people knowledgeable in oil spill response and key members of the response teams should examine. These questions are intended as guidelines only; many other questions are likely to be appropriate at each stage of a critique.

**Detection**

Was the spill detected promptly?

How was it detected?

By whom?

Could it have been detected earlier? How?

Are any instruments or procedures available to consider which might aid in spill detection?

**Notification**

Were proper procedures followed in notifying government agencies? Were notifications prompt?

Was management notified promptly?

Was management response appropriate?

Was Global notified promptly? If so, why, how, and who? If not, why not?

**Assessment/Evaluation**

Was the magnitude of the problem assessed correctly at the start?

What means were used for this assessment?

Are any guides or aids needed to assist spill evaluation?

What sources of information were available on winds and on water currents?

Is our information adequate?

Was this information useful (and used) for spill trajectory forecasts? Were such forecasts realistic?

Do we have adequate information on oil properties?

Do we need additional information on changes of oil properties with time, i.e., as a result of weathering and other processes?

**Mobilization**

What steps were taken to mobilize oil spill countermeasures?

What resources were used?

Was mobilization prompt?

Could it have been speeded up or should it have been?

What about mobilization of manpower resources?

Was the local oil spill cooperative used appropriately?

How could this be improved?

Was it appropriate to mobilize Global resources and was this promptly initiated?

What other corporate resources are available and have they been identified and used adequately?

## RESPONSE ACTION ANALYSIS

### Response - Strategy

Is there an adequate spill response plan for the location?  
Is it flexible enough to cope with unexpected spill events?  
Does the plan include clear understanding of local environmental sensitivities?  
What was the initial strategy for response to this spill?  
Is this strategy defined in the spill plan?  
How did the strategy evolve and change during this spill and how were these changes implemented?  
What caused such changes?  
Are there improvements needed? More training?

### Response - Resources Used

What resources were mobilized?  
How were they mobilized?  
How did resource utilization change with time? Why?  
Were resources used effectively?

- Contractors
- Government agencies
- Company resources
- Cooperatives
- Volunteers
- Consultants
- Other (e.g., bird rescue centers)

What changes would have been useful?  
Do we have adequate knowledge of resource availability?

### Response - Effectiveness

Was containment effective and prompt?  
How could it have been improved?  
Should the location or the local cooperative have additional resources for containment?  
Was recovery effective and prompt?  
How could it have been improved?  
Should the location or the local cooperative have additional resources for recovery of spilled oil?

### Command Structure

Who was initially in charge of spill response?  
What sort of organization was initially set up?  
How did this change with time? Why?  
What changes would have been useful?

Was there adequate surveillance?  
Should there be any changes?  
Were communications adequate?  
What improvements are needed? Hardware, procedures, etc.

Was support from financial services adequate? prompt?  
Should there be any changes?  
Is more planning needed?  
Should financial procedures be developed to handle such incidents?

## RESPONSE ACTION ANALYSIS

### Measurement

Was there adequate measurement or estimation of the volume of oil spilled?  
Was there adequate measurement or estimation of the volume of oil recovered?  
Should better measurement procedures be developed for either phase of operations?  
If so, what would be appropriate and acceptable?

### Government Relations

What are the roles and effects of the various government agencies which were involved?  
Was there a single focal point among the government agencies for contact?  
Should there have been better focus of communications to the agencies?  
Were government agencies adequately informed at all stages?  
Were too many agencies involved?

Are any changes needed in procedures to manage government relations?  
Was there adequate agreement with the government agencies on criteria for cleanup?  
How was this agreement developed?  
Were we too agreeable with the agencies in accepting their requests for specific action items (e.g., degree of cleanup)?  
Should there be advance planning of criteria for cleanup, aimed at specific local environmentally sensitive areas?  
(Such **criteria** should probably also be designed for different types or oils.)

### Public Relations

How were relations with the media handled?  
What problems were encountered?  
Are improvements needed?  
How could public outcry have been reduced? Was it serious?  
Would it be useful to undertake a public information effort to "educate" reporters about oil and its effects if spilled?  
These areas should be investigated shortly after the incident to assure that actions taken are fresh in peoples' minds.

## **5.0**

### **DISCHARGE DETECTION SYSTEMS**

The following sections provide a detailed description of the facility's procedures and equipment used to detect discharges. Procedures in place for regular operations and after hours are discussed as are the methods and frequency of checks and inspections for system reliability.

Additional information on detection systems can be found in the facility's operating guides and manuals.

## 5.1

### DISCHARGE DETECTION BY PLANT PERSONNEL

Facility personnel conduct a periodic walk-through inspection of the operational areas (tank farm, loading rack, dock transfer area, etc.) looking for signs of discharge.

Employees conducting inspections are instructed to inspect for the following conditions, as outlined in the facility SPCC Plan:

- Tank leaks, corrosion, cracks, oil stains
- Tank foundation cracks, discoloration, settling
- Piping corrosion, discoloration, leaks
- Dike erosion, oil stains
- Damage to tanks, dikes, or piping, caused by vegetation roots and/or animals

In the event that a release is detected, the following action list should be followed:

- Shutdown the flow of product.
- Obtain positive product identification and evaluate the situation for personnel safety hazards.
- Contact person in charge.
- See ERAP Section 2 for notification phone list.
- See ERAP Section 7 for immediate response actions.



## 5.2

### **AUTOMATED DISCHARGE DETECTION**

The facility's aboveground storage tanks are equipped with overfill alarms, either automatic tank gauging devices, and/or high level alarms.

These alarm systems are tested regularly by facility personnel to verify reliability.

When an automated alarm occurs, facility personnel must investigate to determine if a discharge has occurred, and if so, perform the actions as noted in the ERAP Section 7.

**SPILL RESPONSE PLAN**

Refer to the following sections of the Emergency Response Action Plan for this section:

<b><u>OIL SPILL RESPONSE PLAN</u></b>	<b><u>EMERGENCY RESPONSE ACTION PLAN</u></b>	<b><u>SECTION</u></b>
6.1	7.1	Immediate Response Actions
6.2	7.2	Containment and Drainage Plan
6.3	7.3	Disposal Plan

## 7.1

### SELF-INSPECTION PROGRAM

This facility conducts self-inspections and includes the written procedures and records of inspections in this section of the Facility Response Plan. The self-inspection program includes tanks and surface impoundments (Section 7.2), secondary containment systems (7.3), and response equipment (7.4). The inspection of tanks and secondary containment, as required by the SPCC regulation, and records of those inspections are cross-referenced in the Plan. Blank inspection forms can be found in Appendix G

**Inspection records are maintained for 5 years.**

**Tank Inspection**

The Plant conducts integrity tests of all in-service tanks following a schedule developed in accordance with the requirements of API 653. In addition, tanks are routinely inspected by plant personnel as required by the SPCC Plan.

The terminal operator is responsible for conducting the routine tank inspections. The Terminal Manager has the responsibility for insuring that the inspections are conducted.

The operator will inspect for the following items:

- Check tanks for leaks, especially looking for:
  - Drip marks;
  - Discoloration of tanks
  - Puddles containing spilled or leaked material
  - Structural integrity
  - Corrosion;
  - Cracks; and
  - Localized dead vegetation
- Check foundations for:
  - Cracks;
  - Discoloration;
  - Puddles containing spilled material
  - Settling;
  - Structural integrity
  - Corrosion;
  - Gaps between tank and foundations; and
  - Damage caused by vegetation roots.
- Check piping for:
  - Droplets of stored material;
  - Discoloration;
  - Corrosion;
  - Structural integrity
  - Bowing of pipe between supports;
  - Evidence of stored material seepage from valves or seals; and
  - Localized dead vegetation

**Surface Impoundment Inspection** - There are no surface impoundments at this facility.

**Inspection Results** - The Tank/Surface Impoundment Inspection Log is shown in Appendix G of this Plan and is used to keep a record of the inspections.

**SECONDARY CONTAINMENT INSPECTION**

The secondary containment systems at the facility described in this Plan are inspected on a regular basis as follows:

**Dike or Berm System**

- Precipitation level in dike/available capacity.
- Operational status of drainage valves.
- Dike or berm permeability.
- Debris.
- Erosion.
- Permeability of the earthen floor of diked area.
- Location/status of pipes, inlets, drainage beneath tanks, etc.

**Secondary Containment**

- Cracks.
- Discoloration.
- Presence of stored materials (standing liquid).
- Corrosion.
- Valve conditions.
- Precipitation
- Debris

**Retention and Drainage Ponds**

- Erosion.
- Available capacity.
- Presence of stored material.
- Debris.
- Stressed vegetation.

During inspections, notes of discrepancies in any of the above items will be noted and reported to the appropriate personnel.

## **7.4**

### **RESPONSE EQUIPMENT INSPECTION**

The applicable emergency response equipment listed in Section 5.0 of the Emergency Response Action Plan part of this Plan is inspected on a regular basis. Each inspection includes the following items:

- Inventory - Item and Quantity.
- Storage Location.
- Accessibility (Time to Access and Respond).
- Operational Status/Condition.
- Actual Use/Testing (Last Test date and Frequency of Testing).
- Shelf Life (Present Age, Expected replacement date).

## TRAINING AND DRILLS

### Program Objectives

The objective of Global's training and drill program is to improve our ability to respond to a spill in a quick, competent, and caring manner and prevent the likelihood of discharged via spill prevention training. A need for continuous training, particularly that involving tabletop simulations and drills, has been shown to be a most effective method of insuring response readiness. The program is structured such that it will continuously assess the strengths and weaknesses of the facility response to enhance capabilities by implementing any improvements that may be identified.

### Key Features

The focus of the program is on facility-specific. The bulk of the facility's training is the responsibility of the facility. .

The program includes activation drills, tabletop simulations, other specialized training and spill prevention briefings. The simulations address a broad range of potential spill scenarios involving different levels of response.

This program of training and drills requires significant ongoing time commitments by personnel at all levels. This investment in time and effort has been endorsed by management as a means of maintaining and continuously improving our response capability.

### Individual Training

Each facility responder will obtain whatever individual training he requires to be able to competently perform his assigned duties and responsibilities.

## TRAINING PROGRAM

### Formal Training

HAZWOPER training is provided to Oil Handling employees. Response team members are required under state and federal regulations to have appropriate up-to-date training to function in their positions.

Training records are maintained for all team members at the facility and will reflect training activities for at least the previous three (3) years.

Global personnel will verify that all response personnel, including contractors and casual labor, have the appropriate training to serve in their capacity during a spill response. All non-Global personnel responding to an Global spill will be required to satisfy the HAZWOPER training requirements of 29 CFR 1910.120 for their position.

Volunteers are not utilized for responding to spills; therefore, no provisions are currently in place to accommodate their training.

### Spill Training / Spill Prevention

Global team members will also receive recommended supplemental training in addition to "general" topics pertinent to spill response. This training will be accomplished by attending Global seminars, training classes, cooperative training classes, outside classes, and various other seminars. Timing of this additional training will vary based on availability of classes and will not be required for team members to perform their spill team job functions.

This training includes, but is not limited to, the following: training in correct equipment operations and maintenance; discharge prevention laws and regulations; and the contents of the facility's SPCC and Facility Response Plans. In addition to formal training, Global conducts spill prevention briefings on a periodic basis as a proactive step to reduce the occurrence of discharges. . These meeting include review of recent spill events at the facility and measures to be taken to minimize the chance of recurrence. A Spill Prevention Meeting Log further describing Spill Prevention activities is included in Appendix H.

### Documentation

The Spill Prevention Meeting Log that is completed each time the facility holds a discussion or training session related to this Plan is included in the Appendix as is a listing of the specific training received by each individual at the facility. Training Records are maintained at the Terminal. Training logs are included in Appendix H.



## 8.2

### Drill Programs Annual Drill Requirements

Applicability	Drill Type	Drills Per Year	Documentation Forms	Comments
All Terminals	QI Notification	4	OPA-1	This is a quarterly phone call/page to the QI or alt. QI when they are not on site. The person calling needs to ask how long it would take the QI/alt. QI to reach the site if there were a spill. One call must be made outside of normal working hours.
Marine Terminals Only	FSO Notification	4	FSO-1	Required for marine terminals only. This is a quarterly phone call/page to the FSO or alt. FSO when they are not on site. The person calling needs to ask how long it would take the FSO/alt. FSO to reach the site if there were an event. This may be combined with the QI Notification, if the QI and FSO are the same individual and documented on the OPA-1/FSO-1 form.
All Terminals	Table Top Exercise	1	OPA-2, OPA-3, & OPA-5. ICS-201 Package (located in ERAP).	The Worst Case Discharge must be exercised once per 3 year term. All elements on the SMT Drill Planning Worksheet must be exercised one per 3 year term.
Marine Terminals Only	Table Top Exercise	1	FSO-2, FSO-3, FSO-5	Required for marine terminals only.
Terminals with hard boom and skimmers	Facility Owned Equipment Deployment	2	OPA-2, OPA-3, OPA-4, OPA-5	Equipment requiring deployment is hard boom and skimmers. Make 1 per year unannounced. An actual spill response will fulfill this requirement.
Terminals that have <b>no</b> hard boom or skimmers	Optional Emergency Procedures Exercise	Quarterly	(1) OPA-1 (during QI) (2) OPA-2 (random)	This unannounced OPTIONAL drill should be used by facilities with no equipment for deployment <b>to meet the requirement for an unannounced exercise</b> if necessary. It can be accomplished by EITHER method listed: (1) during the QI drill notification (2) by randomly asking an employee what he/she would do to initiate response to a particular scenario and then documenting the scenario and response on the appropriate forms.
All Terminals	OSRO Deployment Documentation	1	Written confirmation provided by OSRO that drill is complete	Each terminal must request a letter from their primary OSRO stating that they have deployed the necessary equipment in the same operating environment as our facility.

- Note:
1. The PREP stipulates that all facilities will be on a 3-year Drill Cycle. ***During the 3-year period, all aspects of the Plan must be included in your drills. (See OPA-2 Drill Planning Worksheet for a list of drill objectives).***
  2. One unannounced drill ***must*** be performed each year. It may be a Table Top Exercise, Equipment Deployment or Emergency Procedures.
  3. An actual event can fulfill drill requirements if it is properly documented.
  4. All documentation is kept ***on file at the facility and retained for five years***.
  5. All documentation must be made available for agency inspection.
  6. The facility is subject to **government-initiated unannounced exercises and AREA EXERCISES**. **The Terminal understands that it is required to participate as directed by the EPA and/or USCG.**

**SPILL RESPONSE PLAN DIAGRAMS AND MAPS**

This plan contains a number of diagrams, maps, and photographs to assist response personnel in containment and cleanup operations. These resources are included in the Emergency Response Action Plan Section 8.0 and include the following items.

		<b>Sensitive Resource Legend</b>
	<b>Figure 1</b>	<b>Location Map</b>
	<b>Figures 2 - 3</b>	<b>Protection/Response Maps</b>
	<b>Diagram #1</b>	<b>Site Plan Diagram</b>
	<b>Diagram #2</b>	<b>Site Evacuation Diagram</b>
	<b>Diagram #3</b>	<b>Site Drainage Plan</b>

## FACILITY SECURITY SYSTEMS

Site is manned continuously 24 hours per day, seven days a week.

- **Site Access**

The facility is surrounded by a chain link fence with access provided through secured entry gate. Access through the main entry gate is obtained through the use of a Card Key System.
- **Vandalism Prevention**

All valves not in use are locked in the closed position to prevent vandalism.
- **Lighting**

Operational areas of the facility (the tank farm, loading rack, marine transfer area, etc.) are equipped with lighting.
- **Emergency Shutdowns**

Emergency transfer shutdowns are located at the loading rack and in the control room. Plant personnel receive periodic briefings on the location and use of the emergency transfer shutdowns.
- **Pipeline Connection Caps**

When not in use, pipeline connection caps are blanked and flanged.

**COMMUNICATIONS PLAN**

One key to effective response in any emergency situation is adequate two-way communications among operational levels all the way from the Incident Command Center down to the worker at the emergency site. It is the responsibility of the On-Scene Commander to provide an adequate communications system. This can best be accomplished by systematic planning prior to an emergency so that each requirement will be met smoothly and efficiently when the demand arises.

## **11.1**

### **LINES OF COMMUNICATION**

Global Companies LLC will make every effort to communicate quickly and effectively both internally and externally during spills and spill responses. All company personnel involved in incident response should remember that emergencies often become crises because of confused, mismanaged or missed communications. Responses to incidents must be viewed as "integrated responses" which consider the technical as well as the public affairs components.

When a spill occurs, communication begins immediately at the site. The emergency notification procedure is activated. The first responsibility of each individual involved is to notify those individuals or back-ups assigned to them.

Section 2.0 of the Emergency Response Action Plan details the individuals and organizations and the sequence in which they should be notified in the event of a spill. Multiple numbers for both day and off hour communications are included on the facility's Emergency Notification Phone List.

## **11.2**

### **METHODS OF COMMUNICATION**

Terminal phones, radios, fax, cellular phones.

## COMMAND POST OPERATIONS

During a spill event, it is important to establish and maintain a command center to facilitate:

- The creation of a tightly structured chain-of-command.
- The flow of information needed for informed and coherent decision making and planning.
- The flow of accurate and timely information to government agencies and the news media.
- Centralized accounting and documentation procedures.

Key issues to be addressed at the Command Post include:

- Establishment of meeting schedules, participants, and responsibilities for reporting.
- Definition of casualty control interface.
- Identification of roles for interface with the public, government, and media.
- Development of a public relations plan, initial press statements/briefings.
- Establishment of strategic objectives and response priorities.
- Establishment of a communications network.
- Establishment of procedure for handling questions/requests from the public.

### Location

Response Team activities may be conducted at one of the sites listed below. Separate facilities may be arranged for press conferences and briefings along with meetings with regulatory agencies.

- In the field near the incident (small spills).
- Terminal/Plant Office.
- Alternate Evacuation Validation/Check-In Point.

### Equipment

Equipment to be accessible at the Command Post includes:

- Status boards.
- Facsimile machines.
- Portable radios.
- Overhead projectors.
- Copying machines.
- Office supplies and other materials that may be needed for clerical support.

### Reference Material

Reference Material accessible at the Command Post includes the following:

- Charts/maps of the area, facility plot plan and other facility diagrams.
- Phone directories of the local area.
- Vendor contact phone numbers.
- Manuals and plans listed in the Overview Section of the Plan.

**GENERAL RESPONSE SAFETY****Protective Clothing**

Prior to exposure to contaminants, **positive** identification of the contaminant must be gained. Until positive identification is made, no entry in less than "Level B" protective devices shall be allowed. The four levels of protective clothing are as follows:

Level A

- Pressure demand (positive pressure), full face SCBA or airline unit with escape SCBA.
- Fully encapsulated chemical resistant suit.
- Inner chemical resistant gloves.
- Chemical resistant safety shoes/boots.
- Full time two way communications.

Level B

- Pressure demand (positive pressure), full face SCBA or airline unit with escape SCBA.
- Chemical resistant clothing such as overalls and long sleeved jacket, hooded one or two piece chemical splash suit, or disposable chemical resistant clothing.
- Inner and outer chemical resistant gloves. Chemical resistant safety shoes and boots. Hard hat.
- Two way radio communications.

Level C

- Half facepiece, air purifying respirator with appropriate canister or cartridges.
- Chemical resistant clothing such as overalls and long sleeved jacket, hooded one or two piece chemical splash suit, or disposable chemical resistant clothing.
- Inner and outer chemical resistant gloves. Chemical resistant safety shoes and boots. Hard hat.

Level D

- Coveralls.
- Safety shoes.
- Safety glasses or chemical splash goggles.
- Hard hat.
- Dust mask.

Level D is appropriate only if there are **NO KNOWN OR SUSPECTED** hazardous air contaminants and **NO POTENTIAL** for skin contact with hazardous materials. **GLOBAL EMPLOYEES MAY ONLY RESPOND TO INCIDENTS REQUIRING LEVEL D RESPONSE. OUTSIDE CONTRACTORS ARE USED FOR ALL INCIDENTS REQUIRING LEVEL A, LEVEL B or LEVEL C RESPONSE**

After identifying contaminant(s), select appropriate protective devices based on the hazard.

No employee/contractor shall conduct any operations in areas not directly visible to other personnel. Operations requiring entry to such areas shall be conducted using the "Buddy System" and the Site Supervisor shall be notified. Any personnel conducting operations in such areas will establish and maintain communications with their supervisor for the duration of such activities.

## GENERAL RESPONSE SAFETY

An employee alarm system shall be put in place to notify employees/contractors at the spill site of an emergency, work stoppage, **or** any other condition requiring site wide notification.

Spill developments affecting safety may change frequently. Continual monitoring of conditions is required.

### Temperature Considerations

Ambient temperatures can substantially affect work conditions and worker safety. All personnel shall remain alert to changing conditions affecting their safety. For example:

- Oil spilled during extremely cold weather may not generate vapors in quantities that will support combustion. Even a slight warming trend could cause concentrations of vapors which are flammable.
- Wind changes could cause harmful accumulations of vapors to occur in previously safe areas. Downwind, low lying areas should be particularly suspect. All personnel should remember that sense of smell is not an adequate indication of the presence of harmful gases or vapors.

Some example of temperature concerns are as follows:

Heat Rash - Not only a nuisance, but it can effect the body's ability to tolerate heat. Treat with drying lotions and keep area clean.

Heat Cramps - Generally occur after prolonged exposure to high temperatures coupled with profuse sweating and inadequate replacement of salt.

Heat Exhaustion - Signs include dizziness, profuse sweating, cool moist skin.

Heat Stroke - An extremely serious medical conditions. Symptoms may include dizziness, nausea, severe headaches, hot dry skin, high body temperature. If cooling of the victims body is not begun immediately, irreversible damage or death may result.

During each break or rest period, all workers are encouraged to remove protective clothing to facilitate cooling as needed.

Appropriate supplies of electrolyte replacing fluids and water must be readily available for all personnel. Fluids should be taken regularly while conducting operations in protective clothing. Thirst does not serve as an adequate indicator of the need for fluids.

Hypothermia - If properly protected, cold temperatures pose no problems for response personnel. Hypothermia occurs when the body loses heat faster than it can produce it. The onset of hypothermia is indicated by involuntary shivering, stinging sensation on skin, and speech difficulty. Further heat loss results in forgetfulness and loss of motor skills, leading to collapse, and finally death.



## GENERAL RESPONSE SAFETY

- Protective Clothing - No one type of clothing is best for all weather conditions. "Layered" clothing is generally the best approach to protecting against cold climates. Numerous layers of relatively light clothing with an outer shell of windproof material maintain body temperature much better than a single heavy garment.
- Victims of hypothermia should be treated immediately. Affected persons should be warmed using blankets or warm water as available.

### Water Safety

In the event that any person falls into the water:

- Stop the operation and sound the "man overboard" alarm immediately.
- Approach the person from downstream or downwind.
- Shut off engine when done.
- Use boarding ladder if possible. If no ladder is available, use area of lowest freeboard.
- Keep boat balanced.
- Do not go into the water to help unless the person is unconscious.
- Bring the person on board stomach to gunnel.

### Emergency Medical Treatment

On-site emergency medical response requires the same rapid assessment of the patient as any other situation, but requires the responders to be aware of other considerations that may affect the way they handle the patient. These considerations include the following:

- The potential for contamination of the patient, responders, and equipment should be addressed. Responders should arrange to treat all patients **AFTER** the injured party has been decontaminated according to the Site Safety and Health Plan.
- Site personnel should make the initial assessment of the patient and determine the severity of the injury/illness.
- If the treatment needed is critical care or "life saving" treatment, rapid decontamination of the injured/ill party should be started. Refer to the Site Safety Plan for steps to be taken in an "abbreviated" decontamination for medical treatment.
- **The need for full decontamination should be carefully weighed against the need for prompt medical treatment.**
- The ambulance responding to medical emergencies shall be contacted as soon as possible and instructed exactly where to respond when needed and the nature of the contaminant.
- MSDS information will be available and should be provided to medical personnel to alert them to decontamination requirements.
- If emergency medical treatment is needed, it must be provided by trained medical personnel.

**SITE SPECIFIC SAFETY PROCEDURES**

Anyone handling spilled material will wear as a minimum the following protective equipment:

- Rubber, neoprene, or nitrile gloves
- Rain suits or disposable coveralls when clothing contamination is likely to occur.

Any entry into confined spaces will be conducted following standard confined space entry permit procedures.

Anyone who handles spilled material and gets a small amount of spilled material on their skin or clothing will decontaminate at the end of the work period/shift. Areas of gross contamination should be decontaminated immediately.

Decontamination will include a shower where any significant contamination occurs.

Equipment which comes in contact with spilled material will be cleaned before it leaves the site. Where it is not possible to completely clean equipment before it leaves the site, steps will be taken as needed to prevent the spread of spilled material. This equipment will be cleaned as soon as possible.

All containers of spilled material will be labeled. The label will include the identity of the spilled material and appropriate hazard warnings.

Anyone handling or likely to come in contact with the spilled material must receive a review of the MSDS for the spilled material. This review must take place prior to the employee handling or contacting the spilled material.

Log(s) of workers on site must be kept by the workers' supervisors. The purpose of these logs is to account for everyone on site at all times.

**ALL CLEAN-UP CONTRACTORS MUST HAVE HAZWOPER TRAINING (24 HOURS INITIAL AND 8 HOURS ANNUAL REFRESHER).**

**PRODUCT INFORMATION**

Information on the oil and hazardous materials handled, stored or transported by the facility may be critical to an effective spill response. Material Safety Data Sheets (MSDS) for all of these products are maintained as part of the facility's Hazardous Communications program (HAZCOM). These sheets are readily available to facility personnel and responders and are located in the main office as well as available electronically at [www.globalp.com](http://www.globalp.com).

**Global Newburgh South Terminal  
Fire Prevention Plan**

**1. Purpose Of The Plan**

To afford a safe workplace by identifying potential major fire hazards, establishing standard controls and procedures for the storage and handling of flammable materials and for the maintenance of systems and processes in accordance with 29 C.F.R. §1910.38.

**2. Elements of Plan****Major Fire Hazards Inventory & Locations**

<b>Material</b>	<b>Storage/Use Locations</b>	<b>Properties</b>
Unleaded Gasoline Additives	Tank Farm Load Rack Load Rack Pump Pad, Pipeline Manifolds Gauger Shacks Flammable Storage Cabinet (samples) Maintenance Shop	Flash Point = -40 degrees F Conventional LEL 1.1% UEL 7.6% Reformulated LEL 1.4% UEL 7.6% NFPA Hazards Health 1/Flammability 3/Reactivity 0
<b>Material</b> Distillates Diesel No. 2 Heating Oil	<b>Storage/Use Locations</b> Tank Farm Load Rack Load Rack Pump Pad, Pipeline Manifolds Gauger Shacks Flammable Storage Cabinet (samples) Maintenance Shop	<b>Properties</b> Flash Point = 125 Degrees F LEL 0.6% UEL 7.0% NFPA Hazards Health 1/Flammability 2/Reactivity 0

**3. Storage and Handling Procedures**

Specifically employees should store these materials in approved containers, with lids closed. Smaller containers should be stored in flammable storage lockers with doors closed. Employees should stand upwind during product transfers to avoid breathing vapors. Open flames, sparks or other ignition sources should be kept away from these materials. Permit procedures should be observed. Proper bonding and grounding procedures should be followed during product transfers. Employees should refer to container labels and Material Safety Data Bulletins (MSDBs) for more detailed storage and handling information.

**4. Inventory of Potential Ignition Sources**

Potential sources of ignition include any arc or spark producing operation and any other operation generating sufficient heat to pose as an ignition source. Ignition sources and their respective control measures are listed below.

Welding	Electric Power Tools
Grinding	Internal Combustion Engines
Brazing	Static (from liquid product transfer)
Abrasive Blasting (static)	Open flames
Smoking	Lightning

**FIRE PREVENTION PLAN**  
**Global Newburgh South Terminal**

**5. Controls Procedures**

Control procedures include engineering and procedural/administrative systems.

**Location/System**

**Load Rack**

**Controls**

Electrical Area Classification  
Vapor Recovery System  
No Smoking Policy  
Hot Work Procedure  
Scully Biclops & Load Rack Interlocks  
Truck Brake Interlocks  
Truck and Rack Configuration and Load Procedures (Top and Bottom Loading)  
Flame Arrestors  
Housekeeping (clean up of spills/releases)  
Preventative Maintenance and Periodic Inspection

**Tanks and Tank Farm**

Electrical Area Classification  
Floating Roof Tanks  
Tank Grounding  
Tank High Level Alarms - Overflow Protection  
No Smoking Policy  
Housekeeping (clean up of spills/releases)  
Preventative Maintenance and Area/Tank Periodic Inspection

**Load Rack Pumps and Pipeline Manifolds**

Electrical Area Classification  
Hot Work Procedure (including control of vehicle access)  
No Smoking Policy  
Housekeeping (clean up of spills/releases)  
Preventative Maintenance and Periodic Inspection

**Gauger Shacks and Flammable Storage Cabinets**

Electrical Area Classification  
No Smoking Policy  
Sample Containers (glass or metal with lids closed)  
Storage of sample containers in approved Flammable Cabinet  
Housekeeping (clean up of spills/releases)

**Maintenance Shop and Garage Area**

Storage of gasoline (and other flammable liquids) in approved containers and/or Flammable Cabinet  
Proper storage and handling of flammable compressed gas cylinders  
Housekeeping (clean up of spills/releases)

**FIRE PREVENTION PLAN**  
**Global Newburgh South Terminal**

**6. Fire Protection Equipment & Systems**

Portable Dry Chemical Fire Extinguishers  
Truck Loading Rack Fixed Foam Systems  
Tank Foam System

**7. Fire Detection Systems**

Truck Load Rack Fire Detectors - Foam System Activation  
Fire watches and Employee surveillance

**8. Maintenance Personnel and Fuel Source Control Personnel**

The Terminal Manager and Plant Operators have primary responsibility for maintenance on equipment and/or systems installed to prevent or control ignitions or fires. All personnel may in some degree be involved in maintenance and/or inspection of these systems. These individuals are also responsible for Fuel Source control during certain maintenance activities (e.g. equipment isolation prior to maintenance). Service Providers (e.g. load rack, electrical, annual extinguisher maintenance contracts).

**9. Housekeeping Procedures**

Facility housekeeping measures include provisions for preventing accumulations of combustible debris or material. For the purpose of this Plan, housekeeping measures have been generalized.

All employees will perform basic housekeeping to prevent accumulations of flammable and combustible materials, including ordinary materials such as wood, paper, plastic, and other refuse, as well as fuels, chemical and additives.

In addition to individual responsibilities for housekeeping in their own area, all inside trash containers will be emptied on a bi-weekly basis and the exterior covered dumpster will be emptied weekly.

## **SITE SPECIFIC INFORMATION**

### **Groundwater Contingency Plan**

The Global Newburgh South Terminal protects groundwater by the following methods:

Impervious secondary containment for all aboveground storage tanks capable of containing 110% of the Shell Capacity.

Monitoring of on-site monitoring wells for free product. Any observations of free product would be reported to NYSDEC.

Annual sampling of the on-site monitoring wells with submittal of results to NYSDEC.

Best Management Practices.

Inspection and maintenance of all aboveground storage tanks in accordance with NYSDEC MOSF and CBS regulations and API 653.

### **EPA's RCRA Contingency Plan 40 CFR 265.52**

This Plan meets the requirements of 40 CFR Part 265.52 for hazardous waste generators. Any releases of hazardous waste will follow the response procedures described in this plan.

The facility is exempt from regulation as a hazardous waste treatment, storage, or disposal facility because it meets the requirements of Title 6 of the New York Code of Rules and Regulations (6NYCRR), Section 373-1.1(d)(1)(iv) ("d"). The exemption requirements state that the facility must comply with 6NYCRR Section 373-1.1(d)(1)(iii) ("c") and with the Closure Plan requirements of 6NYCRR Section 373-3.7(a)-(f).

### **NYSDEC Best Management Practices Plan (BMP)**

The Best Management Practices Plan (BMP) is required by the facility's SPDES permit. The BMP Plan requirements are met by this Plan.

The purpose of the BMP is to prevent or minimize the potential for release of significant amounts of toxic or hazardous pollutants to the waters of the State through plant site runoff, spillage or leaks, and sludge or waste disposal. Included in the preparation of this Plan was a review of all areas of the facility where petroleum products are stored and handled to evaluate the potential for a release to waters of the state. The facility ERAP and FRP provide for risk identification and assessment and for the minimization of any potential releases.

A facility review was conducted as part of previous applications. Stormwater BMPs are also inspected on a monthly basis under the SPCC inspection program. The SPDES permit for the terminal requires sampling of the treatment system discharge and final facility discharge for various parameters. The tank farms are contained and lined with a HDPE liner or Clay and all discharges are monitored in order to prevent any major releases from reaching waters of the State.

The following table summarizes the specific requirements for the BMP from the SPDES permit, and references the appropriate sections of this Plan.

<b><i>NYSDEC Best Management Practices Plan (BMP)</i></b>	<b><i>ERAP</i></b>	<b><i>FRP</i></b>
BMP Pollution Prevention Team Due to the size of the facility, all facility personnel including the terminal manager and terminal operators are members of the Pollution Prevention Team. These members are identified in Section 4.0 of the ERAP	4.0	2.0
Reporting of BMP Incidents	2.0	
Risk Identification and Assessment		3.6 and 3.7
Employee Training		8.0; Appendix H & I
Inspection and Records		7.0; Appendix G
Security		10.0
Preventive Maintenance		7.0; Appendix G
Good Housekeeping The facility is regularly inspected to ensure that good housekeeping practices are met. The inspection program is detailed in Section 7.0 of the FRP		7.0
Materials / Waste Handling Storage and Compatibility	7.3	3.5
Spill Prevention and Response	7.0	7.0;
Erosion and Sediment Control / Street Sweeping The terminal conducts a regular program to inspect and clean out oil water separators, loading rack drainage catch basins and drainage system sumps.		7.0
Management of run off	7.2	7.0



## APPENDIX A

### SPILL RESPONSE NOTIFICATION FORM

Date Reported: \_\_\_\_\_ Time Reported: \_\_\_\_\_ NRC Incident  
Number \_\_\_\_\_

Reporter's Last Name \_\_\_\_\_ First \_\_\_\_\_ M.I. \_\_\_\_\_

Reporters Position: \_\_\_\_\_

Reporter's Phone Numbers: Work \_\_\_\_\_ Home \_\_\_\_\_ Pager \_\_\_\_\_

Company Reporting Spill:

Potential RP: \_\_\_\_\_

Potential RP Address, if  
known: \_\_\_\_\_

Potential RP Phone, if  
known: \_\_\_\_\_

Organization Type \_\_\_\_\_

Were Materials Released? \_\_\_\_\_ (Y/N) Confidential? \_\_\_\_\_ (Y/N)

Meeting Federal Obligations to Report? \_\_\_\_\_ (Y/N) Date Called \_\_\_\_\_

Calling for Responsible Party? \_\_\_\_\_ (Y/N) Time Called \_\_\_\_\_

#### Incident Description

Source and/or Cause of Incident \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Date \_\_\_\_\_ Time of Incident \_\_\_\_\_ AM/PM

Incident Address/Location \_\_\_\_\_  
\_\_\_\_\_

Nearest City \_\_\_\_\_ State \_\_\_\_\_ County \_\_\_\_\_ Zip \_\_\_\_\_

Distance from City \_\_\_\_\_ Units \_\_\_\_\_ Direction from City \_\_\_\_\_

Section \_\_\_\_\_ Township \_\_\_\_\_ Range \_\_\_\_\_

Container Type \_\_\_\_\_ Tank \_\_\_\_\_ Capacity \_\_\_\_\_ Units \_\_\_\_\_

Facility Capacity \_\_\_\_\_ Units \_\_\_\_\_

Facility Latitude \_\_\_\_\_

Facility Longitude \_\_\_\_\_

### SPILL RESPONSE NOTIFICATION FORM

CHRIS Code	Released Unit of Quantity Measure	Unit of Measure	Material Released in Water	Quantity
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

#### Response Action

Actions Taken to Correct, Control or Mitigate Incident

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

#### Impact

Number of Injuries \_\_\_\_\_ Number of Fatalities \_\_\_\_\_

Were there Evacuations? \_\_\_\_\_ (Y/N) Number Evacuated \_\_\_\_\_

Was there any Damage? \_\_\_\_\_ (Y/N) Damage in Dollars (approx.) \_\_\_\_\_

Medium Affected \_\_\_\_\_

Description \_\_\_\_\_

More Information about Medium \_\_\_\_\_

#### Additional Information

Any information about the incident not recorded elsewhere in the report?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

#### Caller Notifications

EPA \_\_\_\_\_ (Y/N)? USCG \_\_\_\_\_ (Y/N)? NRC 1-800-424-8802  
\_\_\_\_\_ (Y/N)?

State \_\_\_\_\_ (Y/N)? Other \_\_\_\_\_ (Y/N)? Describe \_\_\_\_\_

**DO NOT WAIT FOR ALL INFORMATION BEFORE CALLING THE NRC**

[illegible]

[illegible]

Name: \_\_\_\_\_ Date: \_\_\_\_\_

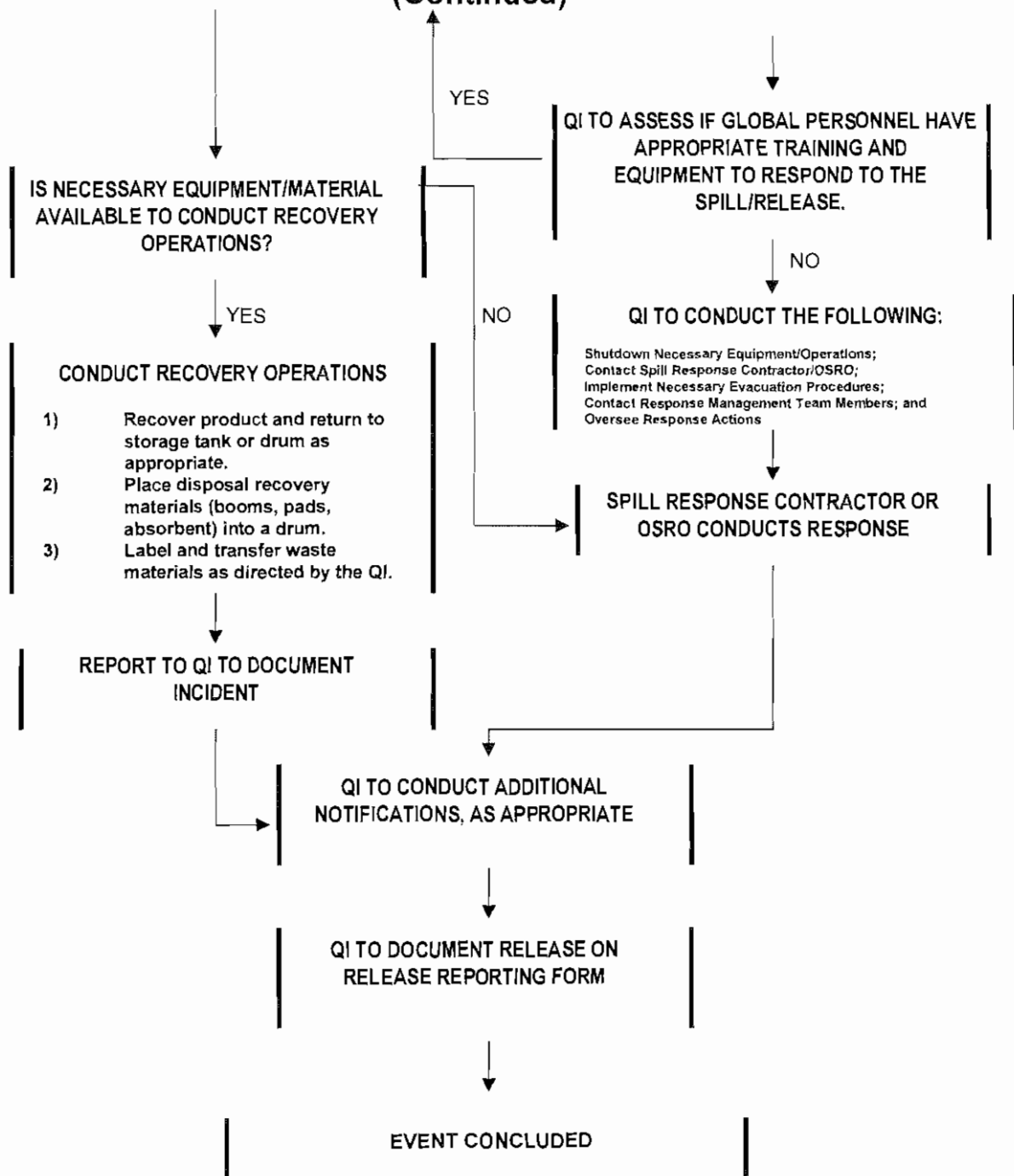
## APPENDIX B

```

graph TD
    A[INDIVIDUAL DISCOVERING SPILL] --> B[CONDUCT INITIAL ASSESSMENT ACTIONS]
    B --> C[NOTIFY TERMINAL OFFICE  
Terminal Manager  
Operations Manager]
    C --> D{HAVE YOU RECEIVED SPILL RESPONSE TRAINING  
AND CAN YOU SAFELY RESPOND TO THE SPILL?  
Do not respond to any spill that poses a threat of Fire / explosion;  
results in harmful vapors; or otherwise presents a health hazard}
    D -- YES --> E[FOLLOW PROCEDURE for  
EMERGENCY]
    D -- NO --> F[RESPONSE ACTIONS  
Establish exclusion zone  
area/ implement  
shutoffs to  
of the leak/spill  
and/or  
material by  
containment  
absorbent,  
or  
temporary berms  
migration.]
    E --> G[QUALIFIED INDIVIDUAL  
WILL ASSESS THE SITUATION]
    G --> H[1) Hazards Involved; (See MSDS Sheets and T...  
2) Magnitude of the Problem;  
3) Resources Threatened; and  
4) Exclusion Zone needed or Evacuation Requ...]
    H --> I[(CONTINUED ON NEXT PAGE)]
  
```

## SPILL RESPONSE FLOWCHART

(Continued)





## APPENDIX C

## WASTE DISPOSAL ACTION PLAN

Date: \_\_\_\_\_  
Location: \_\_\_\_\_  
Source of Release \_\_\_\_\_  
Product / Chemical Released \_\_\_\_\_  
Amount of Release \_\_\_\_\_  
Media (product, soil, water) \_\_\_\_\_  
Weather Conditions \_\_\_\_\_  
\_\_\_\_\_  
  
State Agency \_\_\_\_\_  
Agency Representative \_\_\_\_\_  
Telephone: \_\_\_\_\_  
Inquiry made for variance on: \_\_\_\_\_

### DISOSAL PRIORITIES

#### A. Sample

Analysis date: \_\_\_\_\_  
Lab Name: \_\_\_\_\_  
Hazardous / Nonhaz \_\_\_\_\_

#### B Disposal Options

Disposal Method	Available (Y/N)	Retained for Evaluation (Y)
Natural Attenuation		
Pit Burial		
Landfill		
Incineration		
Treatment		
Reprocessing		
Reclamation		
Recycling		
Well Injection		

Resources for selected Disposal Options \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## WASTE DISPOSAL ACTION PLAN

### C. Information

Generator: \_\_\_\_\_  
USEPA ID: \_\_\_\_\_  
Address \_\_\_\_\_  
\_\_\_\_\_  
Contact: \_\_\_\_\_  
Telephone \_\_\_\_\_  
\_\_\_\_\_  
Properties/waste composition  
Process Generating Waste  
Waste Name \_\_\_\_\_  
EPA Haz Waste ? \_\_\_\_\_  
Identify EPA Listed and Characteristic Waste Properties \_\_\_\_\_  
\_\_\_\_\_  
Identify EPA Waste Codes  
State Waste Codes \_\_\_\_\_  
\_\_\_\_\_

### D Storage and Transportation

Shipping Method: \_\_\_\_\_  
Permits Required \_\_\_\_\_  
Capacity needed: \_\_\_\_\_  
Type of Storage (tanks etc) \_\_\_\_\_  
Temporary Storage Locations \_\_\_\_\_  
\_\_\_\_\_  
PPE and Procedures \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Signature \_\_\_\_\_  
Telephone \_\_\_\_\_  
Date \_\_\_\_\_

## APPENDIX D

## SITE HEALTH AND SAFETY PLAN

Incident Name:		Spill Number#	
SITE INFORMATION			
Incident Location:		Lat: ° ' "N	Long: ° ' "W
Command Post Location			
Control Zones are indicated on the Site Map and identified by:			
Exclusion Line (Hot Zone):			
Contamination Control Line (Warm Zone):			
Support Line (Cold Zone):			
Weather Conditions		Visibility:	Miles: <input type="checkbox"/> Stable <input type="checkbox"/> Unstable
Wind Direction:	Speed:      Knots:	Temp: °F	Time Zone:
Tide Flow:	Next High Tide at	Next Low Tide:	
Magnitude of Tide:	Current: To      @      Knots	Seas: ..      Ft.	
ICS Form 201 – Site map to be completed and attached.			
ORGANIZATION			
Incident Commander:		Deputy Incident Commander:	
Operations Chief:		Safety Officer:	
Planning Chief:		Source Control:	
Site Access Control:		Logistics Chief:	
Liaison:		PIO:	
Other:			
HAZARD EVALUATION,			
Chemicals Involved: <input type="checkbox"/> Gasoline <input type="checkbox"/> Crude Oil <input type="checkbox"/> Diesel/#2		<input type="checkbox"/> Other	
Source:		Material:	
Physical Hazards <input type="checkbox"/> Flammable Liquid (Flash Point <140°F)			
<input type="checkbox"/> Combustible Liquid (Flash Point >140°F)			
<input type="checkbox"/> Lower Explosive Limit – LEL (Max=10%)			
Toxicity: <input type="checkbox"/> Total Hydrocarbon(PEL = 25 ppm) <input type="checkbox"/> H <sub>2</sub> S (PEL=10 ppm)			
<input type="checkbox"/> Carbon Monoxide (PEL 35 ppm)		<input type="checkbox"/> Other (PEL=      ppm)	
<input type="checkbox"/> Other (PEL=      ppm)		<input type="checkbox"/> Other (PEL=      ppm)	
Material Safety Data Sheet (MSDS) Attached <input type="checkbox"/>			
MONITORING			
<input type="checkbox"/> Device Type <ul style="list-style-type: none"> <li>Oxygen %</li> <li>LEL %</li> <li>H<sub>2</sub>S ppm</li> </ul>		<input type="checkbox"/> Device Type <ul style="list-style-type: none"> <li>Oxygen %</li> <li>LEL % or Total Hydrocarbons ppm</li> <li>H<sub>2</sub>A ppm</li> <li>Carbon Monoxide (CO) ppm</li> </ul>	
<input type="checkbox"/> Tubes (25% error) <ul style="list-style-type: none"> <li>Type</li> <li>Other</li> </ul>		<input type="checkbox"/> TLV Meter Total hydrocarbons ppm	

<b>RESPIRATORY PROTECTION</b>	
Guidelines	
<b>No Respiratory Protection</b> <ul style="list-style-type: none"> <li>Total Hydrocarbons <math>\leq</math> 25 ppm</li> </ul>	
<b>½ Mask Organic Vapor Respirator– Maximum Protection Factor = 10 X PEL</b> <ul style="list-style-type: none"> <li>Benzene Levels <math>\leq</math> 7 ppm</li> <li>Total Hydrocarbons <math>\leq</math> 2100 ppm</li> <li>Do not use if H<sub>2</sub>S levels <math>\geq</math> 10 ppm</li> </ul>	
<b>Full-Face Organic Vapor Respirator (Black Cartridge) – Maximum Protection Factor = 50 X PEL</b> <ul style="list-style-type: none"> <li>Benzene Levels <math>\leq</math> 35 ppm</li> <li>Total Hydrocarbons <math>\leq</math> 10,000 ppm (Do not exceed 10% LEL!)</li> <li>Do not use if H<sub>2</sub>S levels <math>\geq</math> 10 ppm</li> </ul>	
<b>Self-Contained Breathing Apparatus (SCBA)</b> <ul style="list-style-type: none"> <li>Low Oxygen Levels - <math>\leq</math> 19.5%</li> <li>Benzene <math>\geq</math> 35 ppm</li> <li>H<sub>2</sub>S Levels <math>\geq</math> 10 ppm (Do not enter any area that exceeds 100 ppm H<sub>2</sub>S)</li> <li>Do not enter any atmosphere that exceeds 10% LEL</li> </ul>	
<b>INITIAL ENTRY – Site Reconnaissance – Verification of Hot Zone</b>	
<b>Entry Team and Back-up Team(s)</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> No Respiratory Protection Needed</li> <li><input type="checkbox"/> ½ Mask Organic Vapor Respirators</li> <li><input type="checkbox"/> Full-Face Organic Vapor Respirators</li> <li><input type="checkbox"/> Fresh Air – Air Line System (with escape pak)</li> <li><input type="checkbox"/> SCBAs</li> </ul>	<b>Decon Team (s)</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Based on Monitoring</li> <li><input type="checkbox"/> ½ Mask Organic Vapor Respirators</li> <li><input type="checkbox"/> Full-Face Organic Vapor Respirators</li> </ul>
<b>PROTECTIVE CLOTHING</b>	
<input type="checkbox"/> Standard Hydrocarbon Release PPE <ul style="list-style-type: none"> <li>Tyvek Coveralls</li> <li>Inner Gloves</li> <li>Nitrile Gloves</li> <li>Rubber Boots</li> </ul>	<input type="checkbox"/> Other Eyewear <ul style="list-style-type: none"> <li>PFD (within 10' of water)</li> <li>Hearing Protection (785 dbI)</li> </ul>
<b>DECONTAMINATION</b>	
<input type="checkbox"/> Contamination Reduction Corridor Established      See Plan (Dry Decon)	
<b>Decontamination Set-up Utilized:</b>	
<input type="checkbox"/> Dry Decon <input type="checkbox"/> 3-Pool Soap and Water – (Full Decon) <input type="checkbox"/> Sanitary Facilities & Lighting Available	
<b>Special Decontamination Procedures for Personnel and/or Equipment:</b>	
<b>HEALTH</b>	
<b>Status of Personnel:</b> <input type="checkbox"/> Accounted for ____ <input type="checkbox"/> Missing/No. ____ <input type="checkbox"/> Injured/No. ____ <input type="checkbox"/> Dead/No. ____	
<b>Emergency Medical Services and Transportation Provided by:</b> _____	
<b>Closest approved medical facility is:</b>	
<b>Name:</b> _____ <b>Location:</b> _____ <b>Phone:</b> _____	

<b>EMERGENCY PROCEDURES</b>	
<b>Rescue:</b> In the event that rescue of Entry Personnel is required, entry shall not be made until the Entry Team Leader and the Safety Officer provide consent or 911 shall be called.	
Evacuation/Escapes Alarm:	
Evacuation/Escapes Route and Location:	
<b>TRAINING</b>	
<input type="checkbox"/> All employees shall have the required training and medical clearances to work in a Hazwoper event and to wear the assigned protective equipment.	
<input type="checkbox"/> All Contractors shall provide documentation of the required training and medical clearances to work in a Hazwoper event and to wear the assigned protective equipment.	
<b>PLAN REVIEW</b>	
<input type="checkbox"/> All Personnel working within the control zones (Hot, Warm and Cold) shall receive a site orientation and shall be familiar with all provisions of this plan.	
<input type="checkbox"/> A documented safety meeting shall be held prior to entry into the Hot Zone with the Entry, Decon and Back-up Teams.	
<b>SAFETY OFFICER</b>  Signature _____	Date: Time:
<b>INCIDENT COMMANDER</b>  Signature _____	Date: Time:

## APPENDIX E





## OSRO, EMERGENCY RESPONSE & ENVIRONMENTAL SERVICES CONTRACT

COMPANY NAME: Global Companies LLC      DATE: 4/26/10

CONTACT NAME: Paul Lavallo/ Ron Kenny

TELEPHONE: 617-660-1119

FACILITY ADDRESS: See Attached List

BILLING ADDRESS: 11 Broadway Street, Chelsea MA 02150

This agreement between Global Companies LLC hereafter referred to as the Company and Miller Environmental Group Inc., hereafter referred to as MEG is for Emergency Response & Environmental Services:

- I. MEG agrees to respond to discharges of Oils, Hazardous Substances, and other environmental emergencies involving Company owned facilities that have been authorized in accordance with the terms of this contract. The Company must call MEG's 24 hour emergency response line (800) 394-8606.
- II. MEG shall be on-call to respond with equipment and manpower, 24-hours a day, 365 days a year.
- III. MEG shall work in accordance with local state and federal environmental regulations & statutes.
- IV. MEG shall supply tools, equipment, materials, labor, supervision and other items to respond, dispose or store on-site at the Company's facility, materials released into the environment or released within the Company's premises.
- V. MEG shall if required supply labor, trained in accordance with OSHA and all other applicable safety regulations.
- VI. MEG shall document all site activities related to the sampling, containment, clean up, storage or transportation of released materials, MEG shall prepare and maintain daily job reports and logs pertaining to all activities performed on behalf of the Company.
- VII. The Company shall make available to MEG, any proprietary information on materials involved in the project/incident that could affect a safe and effective response.
- VIII. MEG shall furnish a Certificate of Insurance demonstrating all required coverage for the work performed. Company, at all times, shall maintain care, custody and control of Company's property, including equipment being worked on by MEG.

  
Company Initials

\_\_\_\_\_  
MEG Initials



- IX. The Company shall assist as necessary in providing secure storage space for drums, tanks, roll-off containers or equipment for the storage of materials on-site prior to disposal.
- X. The Company and MEG shall be jointly responsible for interfacing with local state or federal environmental officials. To the extent required by law it is the Company's legal responsibility to report the spill to federal, state and local officials. The Company will hold MEG harmless for spills or other damages as a result of the actions and operations of others outside of MEG's direct control.
- XI. MEG shall obey all Company safety rules and regulations while on Company property. The Company shall provide MEG with a written set of those rules.
- XII. The Company shall pay MEG for work conducted. MEG will provide a written cost estimate for lump sum work when agreed to by both parties. Otherwise, MEG shall supply an itemized bill at the published time and material rates that are in effect at the time when service is provided. Attached is a copy of the current Rate Schedule (2010). Payment terms are Net 10 days from date of invoice and all other terms and conditions as per the current Rate Schedule apply.
- XIII. This agreement is between the Company and MEG. If the Company seeks compensation from its Insurance Company or Protection and Indemnity Club MEG does not release the Company from its obligations under this agreement. Insurance Companies, Protection and Indemnity Clubs, and their third party management representatives arbitrarily select certain services that they will not cover and as such MEG holds the Company responsible for the entire itemized bill.
- XIV. All field notes, photographs, reports and documentation of the service provided shall remain the property of MEG until full payment is received from the Company.
- XV. Unless agreed to by both parties in writing for a specific transaction, no inconsistent or additional term or condition in any Order or other document shall be applicable to transactions within the scope of this Agreement.
- XVI. This agreement is in effect until canceled in writing by either party.

Signature: *Ronald W. Kenney*  
Printed: Ronald W. Kenney  
Title: Operations Manager  
Company: Global Companies LLC  
Date: 4/26/2010

Signature: *George Wallace III*  
Printed: George Wallace III  
Title: VP Business Development  
Company: Miller Environmental Group Inc.  
Date: 4/26/2010

Miller Environmental Group  
538 Edwards Ave., Calverton, NY 11933  
(800) 394-8606 (631) 369-4900  
www.millerenv.com



Contract Attachment

**GLOBAL COMPANIES LLC**  
*Facilities Covered by MEG for OSRO Coverage*  
*Revised 4/26/10*

**As Primary Responder;**

Global Newburgh	1281 River Road, New Windsor NY 12553
Global Inwood	664 Doughty Blvd., Inwood NY
Shore & Glenwood Gasoline	Shore & Glenwood Road, Glenwood Landing NY 11547
Global-Commander Terminal	1 Commander Square, Oyster Bay NY 11771
Global North Terminal	1254 River Road, New Windsor NY 12553
Global Cargo Terminal	1096 River Road, New Windsor NY 12553
Global South Terminal	1184 River Road, New Windsor NY 12553

**As Secondary Responder;**

Global Albany	50 Church Street, Albany NY 11202
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## SPILL RESPONSE CONTRACT CERTIFICATION

National Response Corporation (NRC) certifies that **Global Companies LLC** has "ensured, by contract or other approved means, the availability of private personnel and equipment necessary to respond, to the maximum extent practicable, to a worst case or medium case discharge" for the below named Facilities. NRC agrees that the Client has the right to name NRC and its resources, including those within its Independent Contractor Network (ICN) for Oil Pollution Act of 1990 (OPA) coverage for the below named Facilities. NRC has filed its Spill Response Plan Appendix with the U.S. Coast Guard, and that the Client is authorized to reference this Appendix in their Facility Response Plan. This Appendix presently covers all ports in the U.S. East, West and Gulf Coasts, Great Lakes and the U.S. Caribbean. NRC reserves the right to rescind this authorization in the event of termination of its contractual arrangements with the Facilities.

### Entered Terminal Facilities:

ALBANY, NY	JOFEE TERMINAL, Springfield, MA
BRIDGEPORT, CT	MACUNGIE, PA
BURLINGTON, VT	NEWBURGH, NY
CHELSEA, MA	NEW ENGLAND PETROLEUM TERMINAL
GLENWOOD LANDING, NY	SANDWICH, MA
GLOBAL CARGO TERMINAL, NEWBURG, NY	SOUTH PORTLAND, ME
GLOBAL NORTH TERMINAL, NEWBURG, NY	WETHERSFIELD, CT
GLOBAL SOUTH TERMINAL, NEWBURG, NY	COMMANDER TERMINAL, OYSTER BAY, NY
INWOOD, NY	

Acknowledged by:  
National Response Corporation

Date: April 27, 2010

A handwritten signature in black ink, appearing to be "J. H. [unclear]", written over a horizontal line.

President

---

### CORPORATE HEADQUARTERS

3500 SUNRISE HIGHWAY, T103  
GREAT RIVER, NEW YORK 11739  
(631) 224-9141 · FAX (631) 224-9082

### REGIONAL OFFICES

NEW YORK, NEW YORK   HOUSTON, TEXAS  
TAMPA, FLORIDA   MEMPHIS, TENNESSEE  
SEATTLE, WA   OLD SAN JUAN, PUERTO RICO



February, 2010

PREP Credit Report

Dear Client:

Please find attached the - ***NRC 2009 Annual Preparedness for Response Exercise Program (PREP) Equipment Deployment Summary Report*** (Attachment A) for review and retention with an accompanying Letter of Attestation (Attachment B). This report documents OSRO equipment deployment exercise information in compliance with the National Preparedness for Response Exercise Program (PREP) Guidelines for reportable and evaluated on-water equipment deployments during exercises, training and actual spill responses. It provides information necessary for your OSRO equipment deployment credit for the 2009 calendar year.

This report documents deployment of the various types of skimming systems and boom that NRC owns or controls for classification purposes. It includes equipment aboard our Oil Spill Response Vessels (OSRVs) and at Independent Contractor Network (ICN) facilities dispersed throughout the various Captains of the Port/Marine Safety Office (COTP/MSO) areas. The information categories include:

**ICN/OSRV** - Each response facility and OSRV that comprise the NRC's response network. We also indicate the USCG OSRO classification ID next to their names.

**LOCATION** - The geographical location (city/state) of the ICN facility or vessel home port.

**COTP-MSO REGION** - The COTP-MSO or EPA Region in which the response equipment and facility personnel are based.

**SKIMMING EQUIPMENT** - Each type of skimmer in the NRC owned or controlled equipment inventory. A numeric figure in the columns for each type of skimmer indicates the number of times that personnel at a particular facility or OSRV have activated and deployed this type of skimming system in the water.

**BOOM EQUIPMENT** - The type and amount of boom deployed by personnel assigned to a particular facility and vessel.



a SEACOR company

Each Independent Contractor Network (ICN) Participant facility and OSRV, of which there are over one hundred, has an active file that feeds data to the Summary Report. In 2009, the following environmental service companies joined or left the ICN, or experienced a company name change as noted (updated accordingly):

<u>Company Name</u>	<u>Status</u>
Acadia	Joined
Bellon/SET	Joined
Bertucci Environmental	Deleted
Gama Oil is now Caribbean Enviromarine Services	Change
Euroway	Joined
Franz Construction	Joined
Smith Maritime	Deleted
K-Sea Hawaii	Joined
Marco St. Croix	Joined
Offshore Marine Towing	Joined
OSI Environmental	Joined
Sea Tow USVI	Joined
Sunbelt	Joined
Woodchuck	Deleted
Fenn Vac	Deleted
Lewis Environmental	Joined

ICN facility equipment deployment records are held at each facility and at NRC Headquarters in Great River, NY. OSRV equipment deployment records are maintained on board the vessels and both at NRC Headquarters and in the NRC Houston Marine Department office. These internal historical records identify each equipment deployment occurrence by:

- NRC Control No.
- Date of deployment
- Event description - actual spill incident, equipment training or exercise
- Type of environment - sheltered , protected or unsheltered
- Type of skimming system deployed
- Type and quantity of boom deployed

If you have any questions regarding this report, contact Chaz Comerford at 631-224-9141. Please ensure individuals responsible for the PREP program in your organization receive this report. If you would like additional copies they are located on our Web site, which is [www.nrcc.com](http://www.nrcc.com) under the client access portion. Widest dissemination of this document is encouraged.

Sincerely,

A handwritten signature in black ink, appearing to read "Steven A. Candito".

Steven A. Candito  
President



## ATTESTATION

I, Steven A. Candito, President of National Response Corporation (NRC), an Oil Spill Removal Organization (OSRO) with full OSRO classifications in all Captain of the Port Zones, for all operating environments within our Area of Service do hereby attest, based upon the information provided to me by the members of the NRC Independent Contractor Network, each of whom are responsible for similar attestations to their own clients under the National Preparedness for Response Exercise Program and based on my own personal knowledge, that boom and skimming systems, more than adequate to satisfy the OSRO field equipment deployment drill requirements of OPA '90 have been deployed on your behalf in the United States East Coast, Gulf Coast, West Coast, Inland River and Caribbean Regions within the most recent calendar year. Further that NRC-owned equipment is inspected and maintained under a formal preventive maintenance program. Personnel training requirements are met through a formal equipment deployment-training program. The personnel who deployed the equipment demonstrated their ability to successfully deploy and operate the equipment and the equipment was in good working order. Further, records of these deployments are maintained at our headquarters in Great River, New York, USA.

Date: 1 February 2010

A handwritten signature in black ink, appearing to read "S. Candito", written over a horizontal line.

Steven A. Candito  
President  
National Response Corporation

Attachment B



# 2009 ANNUAL PREP EQUIPMENT DEPLOYMENT SUMMARY

## NRC Northeast Region

MSO / COTP Zone / EPA Region	Contractor Name / OSRO #	Location	NRC Equipment Storage Site	Boom 6'-18"	Boom 18'-42"	Skimmer Drum	Skimmer Floating Suction	Skimmer Oleophilic Belt	Skimmer Oleophilic Disk / Brush	Skimmer Oleophilic Rope Mat
COTP Baltimore	NRC-0016	Baltimore Harbor	Baltimore, MD		1,000'	1				
COTP Hampton Roads	NRC-0016	Chesapeake	Chesapeake, VA							1
COTP Buffalo	NRC-0016	Oswego Harbor	Oswego, NY		1,000'				1	
COTP Northern New England	NRC-0016	Searsport, Penobscot Bay	South Portland, ME		1,000'				1	
COTP Hampton Roads	NRC-0016	Chincoteague Inlet, Atlantic Ocean	Norfolk, VA		300'					
COTP Delaware Bay	NRC-0016	Paulsboro, NJ	Paulsboro, NJ						1	
COTP Northern New England	NRC-0016	Portland Sea Buoy	South Portland, ME		1,000'			1		1
COTP Southern New England	NRC-0016	East Providence	Providence, RI				1			
COTP Southern New England	NRC-0016	Providence Harbor	Providence, RI / Boston, MA		1,000'	1		1	1	
COTP Delaware Bay	NRC-0016	Delaware Bay	NRC Lynne Frmk		1,000'			1		1
COTP Northern New England	NRC-0016	Portland Bay	NRC Guardian		1,000'			1		1
COTP New York	Ken's Marine Service / 0002	New York Harbor	NA	2,000'						
COTP New York	Ken's Marine Service / 0002	Newark, NJ	NA	600'						
COTP New York	Ken's Marine Service / 0002	Newark, NJ	NA	1,200'						
COTP New York	Ken's Marine Service / 0002	Bayonne, NJ	NA	500'		1	1			
COTP New York	Ken's Marine Service / 0002	Bayonne, NJ	NA	500'		1				
COTP New York	Ken's Marine Service / 0002	New York Harbor	NA	2,500'						
COTP New York	Miller Environmental Group / 0020	Newburgh, NY	NA	1,000'						
COTP New York	Miller Environmental Group / 0020	Newburgh, NY	NA	1,000'						
COTP Hampton Roads	Miller Environmental Group / 0020	Norfolk, VA	NA	1,000'			1			
COTP Baltimore	Miller Environmental Group / 0020	Annapolis, MD	NA	1,000'			1			
COTP Baltimore	Miller Environmental Group / 0020	Annapolis, MD	NA	1,000'			1			
COTP New York	Miller Environmental Group / 0020	Billings, NY	NA	1,000'						
COTP New York	Miller Environmental Group / 0020	Newburgh, NY	NA	1,000'						



# 2009 ANNUAL PREP EQUIPMENT DEPLOYMENT SUMMARY

## NRC Northeast Region

MSO / COTP Zone / EPA Region	Contractor Name / OSRO #	Location	NRC Equipment Storage Site	Boom 6"-18"	Boom 19"-42"	Skimmer Drum	Skimmer Floating Suction	Skimmer Oleophilic Belt	Skimmer Oleophilic Disk / Brush	Skimmer Oleophilic Rops Mop
COTP Baltimore	Miller Environmental Group / 0020	Annapolis, MD	NA	1,000'			1			
COTP Long Island Sound	Miller Environmental Group / 0020	Northport, NY	NA		1,200'					
COTP Long Island Sound	Miller Environmental Group / 0020	Port Jefferson, NY	NA		400'					
COTP Baltimore	Miller Environmental Group / 0020	Pier 13 - Baltimore, MD	NA	1,000'			1			
COTP Baltimore	Miller Environmental Group / 0020	Tangier Sound, MD	NA	1,000'			1			
COTP Baltimore	Miller Environmental Group / 0020	Tangier Sound, MD	NA	1,000'			1			
COTP Baltimore	Miller Environmental Group / 0020	Tangier Sound, MD	NA	1,000'			1			
COTP Baltimore	Miller Environmental Group / 0020	Darby Creek	NA				1			
COTP Baltimore	Miller Environmental Group / 0020	Tangier Sound, MD	NA	1,000'			1			

## APPENDIX F

# APPENDIX F – WORST CASE DISCHARGE PLANNING CALCULATIONS

FACILITY GLOBAL NEWBURGH SOUTH TERMINAL

EPA WORST CASE DISCHARGE VOLUME (WCD):

1. Total AST capacity without adequate secondary containment	0
2. Capacity of largest single or permanently manifolded AST system within a secondary containment area.	2,153,760 gal 51,280 bbls
3. WCD = 1 + 2	2,153,760 gal 51,280 bbls

WCD PLANNING VOLUME CALCULATIONS (based on EPA WCD)  
ATTACHMENT E-1 WORKSHEET TO PLAN VOLUME OF RESPONSE RESOURCES  
FOR WORST CASE DISCHARGE

## Part 1 Background Information

Step (A) Calculate Worst Case Discharge in barrels

51,280

(A)

Step (B) Oil Group <sup>1</sup> (Table 2 and section 1.2 of this appendix)

1

Step (C ) Operating Area (choose one).....

X

Nearshore/Inland  
Great Lakes

or Rivers  
and Canals

Step (D) Percentages of Oil (Table 2 of this appendix)

Percent Lost to  
Natural Dissipation

80

(D1)

Percent Recovered  
Floating Oil

20

(D2)

Percent  
Oil Onshore

10

(D3)

Step (E1) On-Water Oil Recovery

$\frac{\text{Step (D2)} \times \text{Step (A)}}{100}$

10,256

(E1)

Step (E2) Shoreline Recovery

$\frac{\text{Step (D3)} \times \text{Step (A)}}{100}$

5,128

(E2)

Step (F) Emulsification Factor

(Table 3 of this appendix).....

1

(F)

## APPENDIX F – WORST CASE DISCHARGE PLANNING CALCULATIONS

Step (G) On-Water Oil Recovery Resources Mobilization Factor (Table 4 of this appendix)

Tier 1	Tier 2	Tier 3
0.15	0.25	0.40
(G1)	(G2)	(G3)

<sup>1</sup> A facility that handles, stores, or transports multiple groups of oil must do separate calculations for each oil group on site except for those oil groups that consume 10 percent or less by volume of the total oil storage capacity of the facility. For purposes of this calculation, the volumes of all products in an oil group must be summed to determine the percentage of the facility's total oil storage capacity.

Part II On-Water Oil Recovery Capacity (barrels/day)

Tier 1	Tier 2	Tier 3
1,538	2,564	4,102
Step (E1) x Step (F) x Step (G1)	Step (E1) x Step (F) x Step (G2)	Step (E1) x Step (F) x Step (G3)

Part III Shoreline Cleanup Volume (barrels).....

5,128
Step (E2) x Step (F)

Part IV On-Water Response Capacity by Operating Area  
(Table 5 of this appendix)  
(Amount needed to be contracted for in barrels/day)

Tier 1	Tier 2	Tier 3
12,500	25,000	50,000
(J1)	(J2)	(J3)

Part V On-Water Amount Needed to be Identified, but not Contracted for in Advance (barrels/day)

Tier 1	Tier 2	Tier 3
0	0	0
Part II Tier 1 - Step (J1)	Part II Tier 2 - Step (J2)	Part II Tier 3 - Step (J3)

NOTE: To convert from barrels/day to gallons/day, multiply the quantities in Parts II through V by 42 gallons/barrels.

## APPENDIX G



## MONTHLY FACILITY INSPECTION

FACILITY: GLOBAL COMPANIES LLC. CARGO TERMINAL

DATE: MOSF# 03-1520

COMPLETED BY :

NOTE TO INSPECTOR: INSPECT THE FOLLOWING AREAS OF THE FACILITY.  
USE A "Y" TO INDICATE AN ACCEPTABLE CONDITION, AN "N" FOR A NONE  
ACCEPTABLE CONDITION OR "NA" FOR AREAS THAT DO NOT APPLY.

**IMMEDIATELY REPORT ANY OR ALL DEFICIENCIES TO FACILITIES OPERATIONS MANAGER**

TANK AREA	TANK NUMBER & COMMENTS									
	413	414	415	531	532	533	534	535	317	318
TANK SHELLS										
DISCOLORATION										
CORROSION										
LIGHTS			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BULGING										
FOUNDATION, CRACKS			N/A			N/A	N/A	N/A	N/A	N/A
VEGETATION										
PAINT										
PIPES										
SUPPORTS										
HIGH LEVEL ALARMS									N/A	N/A
PUMPS									N/A	N/A
TANK LABELS										
TANK SIDE GAUGE			Y						N/A	N/A
TANK SIDE TEMP									N/A	N/A
FLOATING ROOF	N/A		N/A					N/A	N/A	N/A
TANK VALVES									N/A	N/A

TANK AREA	TANK NUMBER & COMMENTS									
	319	460	454	455	456	457	458	459	316	061
TANK SHELLS	R									
DISCOLORATION	E									
CORROSION	M									
LIGHTS	O									
BULGING	V									
FOUNDATION, CRACKS	E									
VEGETATION	D									
PAINT										
PIPES										
SUPPORTS										
HIGH LEVEL ALARMS	R				N/A			N/A		
PUMPS	E				N/A					
TANK LABELS	M									
TANK SIDE GAUGE	O				N/A					
TANK SIDE TEMP	V		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FLOATING ROOF	E		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TANK VALVES	D									

## CARGO TERMINAL

LOADING RACK AREA	STATUS	COMMENTS		
METER GASKETS				
BOTTOM LOAD COUPLINGS				
ADDITIVE GATE PAKS				
PRODUCT MARKINGS				
DRAINAGE				
PIPING				
TURBINE METER SEALS				
DANLOAD SEALS				
VAPOR HOSE				
GROUNDING SYSTEM				
COMPUTERS				
LIGHTS				
HOSFS / LOADING ARMS				
ALL ELECTRICAL BOLTS IN PLACE				
VALVES				
AIR ELIMINATORS				
FIRE EXTINGUISHERS		INSPECTION EXPIRATION		

SECONDARY CONTAINMENT	NORTH STATUS	SOUTH STATUS	COMMENTS
GENERAL CONDITON			
SEAL AROUND TANKS			
SEAL AROUND PUMP BASES			
SEAL AROUND PIPES			
CONDITION OF ¾ STONE	N/A	N/A	
HOLES OR DEPRESSIONS			
INTERMEDIATE DIKING			
STAIRS			
PITS			

ASBESTOS PIPING	BOILER	SOUTH SHED	DOCK	COMMENTS
GENRAL CONDITION				
OUTER COVERING				
BANDING				
END CAPS				

CATHODIC PROTECTION	NORTH	SOUTH	DOCK	COMMENTS
AMPS				
VOLTS				

RECOVERY TANK	AIR MAIN	AIR O	KNOCKOUT	COMMENTS
TOTAL				
WATER				

## CARGO TERMINAL

LOAD RACK FOAM SYSTEM	STATUS	COMMENTS
RACK NOZZELS		
RACK FIRE DETECTORS		
FOAM HOUSE HEAT		
FOAM TANK		
FOAM VALVES		
FIRE DEPT. CONNECTION		
ALL VALVES LOCKED OPEN		
FOAM SYSTEM AUTO		

VAPOR RECOVERY SYSTEM	STATUS	STATUS	COMMENTS
	UNIT #1	UNIT #2	
LIGHTS ON FRONT PANEL			
ANTIFREEZE LEVEL			
AIR GAUGES			
SHUTDOWN CIRCUIT			
PROPANE LEVEL			

DOCK AREA	STATUS	COMMENTS
STRUCTURE		
CELLS		
LIGHTS		
DRAIN PAN		
VALVES		
CONNECTIONS		
SAFETY EQUIPMENT		
SAFETY SIGNS		
FIRE EXTINGUISHERS		INSPECTION EXPIRATION
HYDROSTATIC LINE TEST		INSPECTION EXPIRATION

SEPERATOR AREAS	STATUS	STATUS	STATUS	STATUS	COMMENTS
	OUTFALL #1	OUTFALL #2	OUTFALL #3	LOADRACK	
SEPERATOR			N/A		
WEIR				N/A	
HAY BAILS			N/A	N/A	
VALVES		N/A	N/A		

SPILL EQUIPMENT	STATUS	COMMENTS
BOOM BOAT	N/A	
BOOM TRAILER	N/A	
SPILL TRAILER	N/A	
SPILL PADS		TOTAL BAILS
ABSORBENT MATERIAL		TOTAL BAGS



CARGO TERMINAL

LIST ANY NEEDED REPAIRS / REPAIRS THAT WERE COMPLETED

[illegible]

THIS INSPECTION HAS BEEN PERFORMED IN A MANNER CONSISTANT  
WITH 6NYCRR 613.6

INSPECTOR'S SIGNATURE \_\_\_\_\_

INSPECTOR'S ADDRESS 1096 RIVER ROAD NEW WINDSOR, NY 12553

FACILITY MANAGER'S SIGNATURE \_\_\_\_\_

MONTHLY SECURITY EQUIPMENT INSPECTION  
FACILITY:GLOBAL COMPANIES LLC. CARGO TERMINAL

DATE:

COMPLETED BY: \_\_\_\_\_

NOTE TO INSPECTOR: INSPECT THE FOLLOWING AREAS OF THE FACILITY.  
USE A "Y" TO INDICATE A ACCEPTABLE CONDITION, AN "N" FOR A NONE  
ACCEPTABLE CONDITION OR "NA" FOR AREAS THAT DO NOT APPLY.

**IMMEDIATELY REPORT ANY OR ALL DEFICIENCIES TO FACILITIES SECURITY OFFICER**

SECURITY EQUIPMENT	STATUS	COMMENTS
TWO-WAY Radio # 001		
TWO-WAY Radio # 002		
TWO-WAY Radio # 003		
PHONE LINE (845)562-0567		
PHONE LINE (845)562-0619		
PHONE LINE (845)562-0475		
PHONE LINE (845)562-0568		
FAX LINE (845)562-4490		
FAX MACHINE		
CAMERA SYSTEM		
CAMERA #001		
CAMERA #002		
CAMERA #003		
CAMERA #004		
CAMERA #005		
CAMERA #006		
ENTRANCE GATE		
EXIT GATE		
2000 GMC UTILITY		

THIS INSPECTION HAS BEEN PERFORMED IN A MANNER CONSISTENT  
WITH 33CFR 105.405 (4)

INSPECTOR'S SIGNATURE \_\_\_\_\_

INSPECTOR'S ADDRESS 1184 RIVER ROAD NEW WINDSOR, NY 12553

FACILITY MANAGER'S SIGNATURE \_\_\_\_\_

## APPENDIX H

## **APPENDIX H**

### **TRAINING PROGRAMS**

#### **TRAINING**

Personnel that handle oil or are involved in waste/material management activities are employed on a probationary basis during which they are scheduled to work a shift that will enable the Terminal Manager to provide General Facility Orientation Training and evaluate the employee. Following an employee's probationary period, the Terminal Manager and other appropriate personnel will evaluate whether the employee is competent to assist in Terminal operations.

Permanent oil handling employees receive, at a minimum, initial 24 hour OSHA Hazardous Waste Operations and Emergency Response (HAZWOPER) First Responder-Operations Level training and Contingency Plan training. Thereafter employees are provided with annual 8-hour HAZWOPER refresher training, Contingency Plan (SPCC, OPA 90, ERAP) refresher training and waste/material management training.

#### ***GENERAL FACILITY ORIENTATION TRAINING***

General Facility Orientation Training is provided to all newly hired personnel whose job descriptions include, but are not limited to, oil handling operations or waste management activities. The training is provided by the Terminal Manager. The purpose of the training is to provide knowledge of day to day operations and basic emergency response procedures. The General Facility Orientation Training includes the following elements:

- Transfer Operations: New employees will be taught to familiarize themselves with the proper sequence of handling the cargo transfers and operation and maintenance of equipment to prevent discharges. This includes the proper valve manipulation, grounding procedures, connection procedures etc.
- Instruction as to the contents of the contingency plans to obtain complete knowledge of Terminal operating procedures, etc.
- Operation of fire fighting equipment.
- Instruction in the proper gauging and sampling techniques for shore tanks.
- Familiarization with the Terminal documentation relating to facility operations.
- Instruction of Facility Spill Response Actions and Spill Management Procedures, including familiarization with various pollution abatement equipment (sorbent materials, booms, etc.) and the use of available containment equipment.
- Training in general maintenance schedules and procedures.

Terminal personnel are trained that care and good judgment are the best means of preventing an emergency. Facility personnel are instructed to:

- Exercise care in the delivery of all products;
- Never leave a fuel transfer operation unattended;
- Keep a close watch on storage tank levels and product pipelines while conducting transfer operations;
- Perform preventative maintenance on fuel handling equipment; and
- As a general rule, do not wait for problems to occur. Anticipate problems and take precautionary measures to prevent them.

### ***OSHA HAZWOPER TRAINING***

All oil handling personnel undergo initial HAZWOPER training at the First Responder-Operations level with annual 8-hour refreshers to meet the requirements of 29 CFR 1910.120. Training is conducted by an outside consultant qualified to provide such training. The following topics are covered in the initial and annual HAZWOPER training programs.

- Knowledge of basic hazards;
- Understanding of hazardous material terms;
- Knowledge of basic site control, containment, and confinement operations;
- Understanding of standards operating procedures and termination procedures;
- Knowledge on how to implement the facility contingency plans;
- Understanding of classification, identification and verification of known and unknown materials using direct reading instruments;
- Understanding of the Response Management System and ability to function in assigned roles;
- Proper selection of personal protective equipment;
- Understanding of hazard risk assessment techniques;
- Demonstrate ability to perform advance site control, containment, and confinement operations;
- Understanding of decontamination procedures;
- Understanding of termination procedures; and
- Understanding of basic toxicological terminology and behavior.

### ***CONTINGENCY PLAN TRAINING***

The Environmental Health and Safety Officer provides initial training on the Contingency Plan including SPCC and SWP3 requirements. Annual Contingency Plan refresher training is also provided. The training covers the following topics.

- Contents of the Facility Contingency Plans;
- Spill Response Procedures;
- Fire, Medical and Explosion Response;
- Internal and external (state/EPA) notification procedures;
- Applicable Pollution Control laws, rules and regulations;
- Facility Alarms and Communications Systems;
- Emergency Equipment and Systems;
- Facility Evacuation;
- Potential Spill Scenarios;
- Reportable quantities and other elements;
- Hazards associates with products used at the facility;
- Spill prevention practices;
- Review and critique of past spill events
- Storm Water Pollution Prevention Requirements; and
- A review of the most recent inspection results and any resulting changes to storm water pollution prevention or new requirements, including:
  - A review of sampling methodology;
  - Stormwater BMPs and discharge operations;
  - A review of the proper measures and discharge controls to be used by employees (where applicable) on a regular basis, including:

Fueling procedures;  
Proper painting procedures; and  
Good housekeeping measures.

#### **WASTE/MATERIAL MANAGEMENT TRAINING**

Facility personnel are provided on-the-job training and annual classroom instruction on elements required by waste regulations. Personnel receive training on hazardous materials and waste at the facility, container labeling, storage area management, manifests and other elements of hazardous waste and hazardous material management. Initial and annual classroom training is provided by the Environmental Health and Safety Officer. On the job training is provided by the Terminal Manager and experienced Terminal Operators:

Oil Handling Employees (Yardmen) (all non-administrative personnel)

- Right to Know (MSDS) Training
- Properties of Hazardous Wastes and Hazardous Materials
- Waste Handling Practices
- Drum Labeling, Management, Storage and Documentation Practices
- Emergency Procedures, Equipment and Systems
- Spill Reporting
- Personnel Safety Equipment

Waste Shippers

Includes all topics as above and includes:

- Hazardous Waste Manifest and Enforcement
- Universal Wastes and Waste Management Policies

Terminal Management

Includes all topics listed for both categories above and includes:

- Generator Status and Hazardous Waste Minimization
- Identifying and Classifying Hazardous Wastes
- Recycling and Treatment
- Personnel Training
- Air Emission Standards

#### **RECORDKEEPING**

Completed training records are maintained at the Terminal Office and include:

- HAZWOPER training sign-in sheets and certifications;
- Signature sheets documenting receipt of ICP and Waste/Material Training; and
- Signature sheets documenting that the Contingency Plans were read.

Training records on current personnel are maintained for at least five years from the date such personnel last worked at the facility. Training and Meeting records include, the names of those personnel attending the sessions and a summary list of the topics discussed and any actions taken.

## TRAINING LOG

LOCATION \_\_\_\_\_

Date: \_\_\_\_\_

Trainer: \_\_\_\_\_

Hours: \_\_\_\_\_

### TRAINING TOPICS

NAME	SIGNATURE

## DISCHARGE/SPILL PREVENTION MEETING LOG

Discharge/Spill Prevention meetings should be held on an annual basis, at a minimum, in order to review proper discharge/spill prevention procedures outlined in the SPCC and SWP3 components of this plan (i.e., review of spill events, spill prevention measures and storm water best management practices, etc.).

**Date:** \_\_\_\_\_ **Terminal :** \_\_\_\_\_

**Attendees:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Subject/Issue Identified	Required Action	Implementation Date	Complete (Y/N)



## APPENDIX I

## Drill Programs Annual Drill Requirements

Applicability	Drill Type	Drills Per Year	Documentation Forms	Comments
All Terminals	QI Notification	4	OPA-1	This is a quarterly phone call/page to the QI or alt. QI when they are not on site. The person calling needs to ask how long it would take the QI/alt. QI to reach the site if there were a spill.
Marine Terminals Only	FSO Notification	4	FSO-1	Required for marine terminals only. This is a quarterly phone call/page to the FSO or alt. FSO when they are not on site. The person calling needs to ask how long it would take the FSO/alt. FSO to reach the site if there were an event. This may be combined with the QI Notification, if the QI and FSO are the same individual and documented on the OPA-1/FSO-1 form.
All Terminals	Table Top Exercise	1	OPA-2, OPA-3, & OPA-5. ICS-201 Package (located in ERAP).	The Worst Case Discharge must be exercised once per 3 year term. All elements on the SMT Drill Planning Worksheet must be exercised one per 3 year term.
Marine Terminals Only	Table Top Exercise	1	FSO-2, FSO-3, FSO-5	Required for marine terminals only.
Terminals with hard boom and skimmers	Facility Owned Equipment Deployment	2	OPA-2, OPA-3, OPA-4, OPA-5	Equipment requiring deployment is hard boom and skimmers. Make 1 per year unannounced.
Terminals that have <u>no</u> hard boom or skimmers	Optional Emergency Procedures Exercise	Quarterly	(1) OPA-1 (during QI) (2) OPA-2 (random)	This unannounced OPTIONAL drill should be used by facilities with no equipment for deployment to meet the requirement for an unannounced exercise if necessary. It can be accomplished by EITHER method listed: (1) during the QI drill notification (2) by randomly asking an employee what he/she would do to initiate response to a particular scenario and then documenting the scenario and response on the appropriate forms.
All Terminals	OSRO Deployment Documentation	1	Written confirmation provided by OSRO that drill is complete	Each terminal must request a letter from their primary OSRO stating that they have deployed the necessary equipment in the same operating environment as our facility.

**Note:** 1. The PREP stipulates that all facilities will be on a 3-year Drill Cycle. ***During the 3-year period, all aspects of the Plan must be included in your drills. (See OPA-2 Drill Planning Worksheet for a list of drill objectives).***

2. One unannounced drill must be performed each year. It may be a Table Top Exercise, Equipment Deployment or Emergency Procedures.

3. An actual event can fulfill drill requirements if it is properly documented.

4. All documentation is kept **on file at the facility and retained for five years.**

5. All documentation must be made available for agency inspection.

6. The facility is subject to **government-initiated unannounced exercises and AREA EXERCISES. The Terminal understands that it is required to participate as directed by the EPA and/or USCG.**

## QI/FSO NOTIFICATION DRILLS

Applies to:	- Each Facility
Frequency:	- Quarterly
Initiated By:	- Terminal personnel
Participants:	- Facility personnel, Qualified Individual (QI) or Facility Security Officer (FSO) as applicable.
Objective:	- Exercise communication between facility personnel and QI/FSO.
Procedures:	<ul style="list-style-type: none"><li>- Each quarter someone at the terminal must attempt to make contact with the QI/FSO (or alternate) when he/she is away from the terminal.</li><li>- This contact can be initiated at any time by telephone or pager. - Caller should ask QI/FSO how long it would take to reach the terminal.</li><li>- One quarterly call per year must be made outside of normal business hours.</li><li>- The QI/FSO's response should be documented on Form OPA-1 or FSO-1.</li><li>- This requirement can be fulfilled during the course of any conversation initiated by terminal personnel whether or not the original purpose was for the drill itself.</li></ul>
Documentation Required:	- Fill out form OPA-1 "QI Notification Form" or FSO-1 "Facility Security Officer Notification Form" as applicable.
Verification:	- To be conducted by responsible agency during periodic site visits.
Records Retention:	- 5 years - Records to be kept at the facility in the Drill file
Evaluation:	- Self evaluation - The evaluation should assess the terminal's ability to contact the QI/FSO. If the QI/FSO can't be reached, a better method of communication should be established
Credit:	- Credit may be taken for this exercise if completed as part of another drill, normal business activities or an actual spill response, provided that the objectives of the drill are met and the drill is properly documented.

## SPILL MANAGEMENT TEAM TABLETOP EXERCISE (SMT TTX)

Applies to:	- Each Facility Spill Management Team (SMT)
Frequency:	- Annually
Initiated By:	- Terminal
Participants:	- Personnel identified in the Response Plan
Objective:	- Exercise the SMT's organization, communication and decision making in managing a spill response.
Procedures:	<ul style="list-style-type: none"><li>- Plan the drill scenario using the Drill Planning Worksheet (form OPA-2)</li><li>- Conduct the drill</li><li>- Hold a debriefing meeting</li><li>- Document participation (form OPA-3, drill events (form OPA-4) &amp; lessons learned (form OPA-5)</li><li>- At least one SMT TTX every 3 years shall involve simulation of a worst case discharge (WCD) scenario.</li></ul>
Documentation Required:	<ul style="list-style-type: none"><li>- Fill out form OPA-2 "Drill Planning Worksheet"</li><li>- Fill out form OPA-3 Spill Drill Participation Log"</li><li>- Include a log of events (noting times &amp; actions taken)</li><li>- Fill out form OPA-5 "Lessons Learned"</li></ul>
Verification:	- To be conducted by responsible agency during periodic site visits
Records Retention:	- 5 years - Records to be kept at the facility in the Drill file
Evaluation:	- Self Evaluation - A debriefing session is held following the exercise to discuss what went right, areas in need of improvement and lessons learned. Any needed changes are logged on the OPA-5 form "Lessons Learned".
Credit:	- Credit may be taken for this exercise if completed as part of another drill or an actual spill response, provided that the objectives of the drill are met and the drill is properly documented.

## FACILITY OWNED EQUIPMENT DEPLOYMENT DRILLS

Applies to:	- Facilities with <b>facility-owned equipment</b>
Frequency:	- Semi-annually
Initiated By:	- Terminal
Participants:	- Facility personnel
Objectives:	<ul style="list-style-type: none"><li>- Demonstrate ability of personnel to deploy and operate equipment.</li><li>- Ensure equipment is in proper working order.</li></ul>
Procedures:	<ul style="list-style-type: none"><li>- Deploy and operate a representative sample of facility-owned response equipment (hard boom &amp; skimmers only) identified in the Response Plan.</li><li>- For facilities with boom and skimmers, 1,000' of each type of boom and one of each type of skimmer must be deployed <b><u>twice per year</u></b>. (If your facility does not have 1,000' of boom then deploy entire length.)</li><li>- Physically test mechanical equipment to ensure that it will operate in the appropriate response environment. <b>Dysfunctional equipment is to be repaired or replaced within 30 days.</b></li><li>- <b>Equipment that is not deployed must be included in a comprehensive inspection and maintenance program</b> which ensures that the equipment is being kept in good operating condition. All inspection and maintenance must be documented.</li></ul>
Documentation Required:	<ul style="list-style-type: none"><li>- Fill out form OPA-2 "Drill Planning Worksheet"</li><li>- Fill out form OPA-3 "Spill Drill Participation Log"</li><li>- Fill out form OPA-4 "Facility Response Equipment Deployment"</li><li>- Fill out form OPA-5 "Lessons Learned"</li><li>- If you use your own inspection and maintenance program documentation, include it in your Inspection/Drill file(s).</li></ul>
Verification:	- To be conducted by responsible agency during periodic site visits
Records Retention:	- 5 years - Records to be kept at the facility in the OPA-90 Drill file
Evaluation:	- Self-evaluation
Credit:	- Credit may be taken for this exercise if completed as part of another drill or an actual spill response, provided that the objectives of the drill are met and the drill is properly documented.

## OSRO EQUIPMENT DEPLOYMENT DOCUMENTATION

Applies to:	- All facilities
Frequency:	- Annually
Initiated By:	- Terminal
Participants:	- Contractor
Objectives:	<ul style="list-style-type: none"><li>- Ensure response equipment is operational.</li><li>- Ensure capability of contractor personnel in the deployment and operation of equipment.</li><li>- Ensure that the primary contractor participates in annual deployment drills.</li></ul>
Procedures:	<ul style="list-style-type: none"><li>- Obtain documentation from OSRO that a representative sample of each type of response equipment identified in the Plan was deployed and tested.</li><li>- <b><i>Equipment that is not deployed must be included in a comprehensive inspection and maintenance program</i></b> which ensures that the equipment is being kept in good operating condition,</li><li>- Each terminal must maintain proper documentation of all inspection and maintenance conducted by the OSRO.</li></ul>
Documentation Required:	- Documentation to be received from OSRO to include the details of the drill and equipment deployed. Documentation should be signed by the OSRO.
Verification:	- To be conducted by responsible agency during periodic site visits
Records Retention:	- 5 years - Records to be kept at the facility in the Drill file
Evaluation:	- Self-evaluation by OSRO
Credit:	<ul style="list-style-type: none"><li>- Credit may be taken for this exercise if completed as part of another drill or an actual spill response, provided that the objectives of the drill are met and the drill is properly documented.</li><li>- Global may take credit for OSRO equipment deployed by contractor exercises at other facilities if the deployment method is consistent with deployment defined in our Plan.</li></ul>

## GOVERNMENT-INITIATED UNANNOUNCED EXERCISES

Applies to:	- Vessel and MTR facility response plan holders within the area
Frequency:	- Once per 3 years, if selected.
Initiated By:	- Regulatory Agency
Participants	- Terminal responders
Scope:	<ul style="list-style-type: none"><li>- These exercises are designed to provide an evaluation, on a random basis, of the response preparedness of Facility Response Plan (FRP) holders. If selected, facility will be required to participate in either a table top exercise or an equipment deployment exercise as directed by the regulatory agency. A scenario will be presented by the senior on-scene coordinator.</li><li>- Exercises would involve response to an EPA small Discharge or USCG average most probable discharge scenario (50 bbls).</li><li>- Exercises are limited to approximately 4 hours in duration.</li></ul>
Objectives:	<ul style="list-style-type: none"><li>- Conduct proper notifications as addressed in FRP</li><li>- Activate QI and Spill Management Team</li><li>- Verify equipment availability from OSRO in accordance with the FRP</li><li>- Deploy equipment, if applicable, to respond to spill scenario</li><li>- Demonstrate the initiation of an Incident Action Plan (IAP)</li></ul>
Documentation Required:	<ul style="list-style-type: none"><li>- Fill out form OPA-2 "Drill Planning Worksheet"</li><li>- Fill out form OPA-3 "Spill Drill Participation Log"</li><li>- Fill out form OPA-4 "Facility Equipment Deployment"</li><li>- Fill out form OPA-5 "Lessons Learned"</li><li>- If you use your own inspection and maintenance program documentation, include it in your OPA-90 Inspection/Drill file(s).</li></ul>
Verification:	- Regulatory Agency
Evaluation:	- Regulatory Agency
Records Retention:	- 5 years - Records to be kept at the facility in the Drill file

## QI/ FSO NOTIFICATION LOG

CHECK ALL BOXES THAT APPLY

OPA-1 ☐ (Check for OPA QI Notification Form)  
FSO-1 ☐ (Check for Facility Security Officer Notification Form)

☐ Qualified Individual (QI) Notification

☐ Facility Security Officer (FSO)

Facility Name: \_\_\_\_\_ QI/FSO Caller Name: \_\_\_\_\_

Drill Date: \_\_\_\_\_ QI/FSO Caller Position: \_\_\_\_\_

Scenario: \_\_\_\_\_

Emergency Procedures Discussed: ☐ Yes ☐ No

Security Guard Service Contacted: ☐ Yes ☐ No

Guard deployment response available within 12 hrs? ☐ Yes ☐ No

	QI/FSO	Alternate QI/ FSO #1	Alternate QI/ FSO #2
QI/FSO Called:			
QI/FSO Location Called:			
Number Called:			
Time of Call:			
Time of Callback:			
Time to Arrive at Facility:			

Drill Evaluation:

Changes to be Implemented:

Timetable for Implementation: \_\_\_\_\_

QI/FSO Caller Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Retain in Drill File for Five (5) Years.



## DRILL PARTICIPATION LOG

CHECK ALL BOXES THAT APPLY

OPA-3 ☐ (Check for OPA/FRP Drills)

FSP-3 ☐ (Check for Security Drills)

Date: \_\_\_\_\_

Time: \_\_\_\_\_

Location: \_\_\_\_\_

Observer: \_\_\_\_\_

Duration of exercise: \_\_\_\_\_ hrs.    Announced ☐                      Unannounced ☐

Drill type (check all that apply):

- ☐ SMT Tabletop
- ☐ Transportation Security Team Table Top Exercise
- ☐ Facility Equipment Deployment
- ☐ Emergency Procedures Exercise
- ☐ OPA Plan Review
- ☐ FSO Plan Review
- ☐ SPCC Annual Review
- ☐ Fire
- ☐ Other

### PARTICIPANT ROSTER

Printed Name:

Signature:

Printed Name:

Signature:


Drill Facilitator: \_\_\_\_\_

See OPA-1 FSP-1 for QI Drill participants/information.

See OPA-2 / FSP-2 for Drill Objectives exercised for SMT-TTX and/or TST-TTX and Equipment Deployment.

## FACILITY RESPONSE EQUIPMENT DEPLOYMENT

### CHECK ALL BOXES THAT APPLY

OPA-4 ☐ (For OPA/FRP Drills)

FSP-4 ☐ (For Security Drills)

FACILITY NAME: \_\_\_\_\_ DRILL DATE: \_\_\_\_\_ OBSERVER: \_\_\_\_\_

Check one: ☐ Exercise ☐ Actual Response

If Exercise, check one: ☐ Facility Initiated ☐ Government Initiated ☐ Announced ☐ Unannounced

SCENARIO/EVENT: \_\_\_\_\_

Time Started: (This is the point in which the drill begins and the Incident Commander requests equipment.)

Equipment: owned by: ☐ OSRO ☐ Facility deployed by ☐ OSRO ☐ Facility

1) Time boom arrives at deployment site: \_\_\_\_\_

2) Time boom deployed: \_\_\_\_\_

3) Amount of boom deployed? \_\_\_\_\_

4) Time skimmer/vac truck arrives on-scene: \_\_\_\_\_

5) Is equipment part of an inspection and maintenance program? ☐ Yes ☐ No

6) Was equipment deployed at least the amount required to respond to a small spill as described in OPA plan? ☐ Yes ☐ No

Personnel: (Fill out OPA 3 Drill Participation Log)

1) Was equipment deployed by personnel responsible for its deployment in an actual spill? ☐ Yes ☐ No

2) Are facility personnel responsible for response operations involved in a training program? ☐ Yes ☐ No

3) Security Guard Service Contacted? ☐ Yes ☐ No

4) Guard deployment response time available within 12 hours? ☐ Yes ☐ No

Equipment Type (List all equipment deployed)	Quantity of each type of equipment deployed:	Deployment location	Operational Status	Actions taken to correct/replace inoperable equipment

Certifying Signature: \_\_\_\_\_

IMPORTANT notes: For documentation purposes the following forms must be filled out and attached to this form (OPA4/FSP-4):

- Objectives of equipment deployment are captured on the form OPA-2 / FSP-2
- Participants involved in Equipment Deployment are captured on form OPA-3 / FSP-3 - Lessons learned are captured on the form OPA-5 / FSP-5 Lessons Learned
- Records must be retained for 5 years.

All equipment not deployed must be included in an inspection & maintenance program and records maintained for five years

## DRILL PLANNING WORKSHEET

CHECK ALL BOXES THAT APPLY

OPA-2□ (For OPA Drills)  
FSP-2□ (For Security Drills)

Terminal: \_\_\_\_\_ QI: \_\_\_\_\_ Date of Drill: \_\_\_\_\_

Time of Drill: Unannounced ☐ Yes ☐ No Observer:

Drill Weather Conditions: \_\_\_\_\_ Potential Media: \_\_\_\_\_

Drill Scenario:

Expectations (other than those checked below) of Responder:

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Agency involvement: ☐ USCG ☐ EPA ☐ State ☐ Fire ☐ Police ☐ LEPC ☐ Other

Drill Type: \_\_\_\_\_

<input type="checkbox"/> Spill Mgmt. Team Table Top (SMT-TTX)	<input type="checkbox"/> Transportation Security Table Top (TST TTX)
<input type="checkbox"/> Facility Equipment Deployment	<input type="checkbox"/> Facility Guard Deployment
<input type="checkbox"/> OSRO Equipment Deployment	<input type="checkbox"/> Contraband Search Exercise
<input type="checkbox"/> Emergency Procedures Exercise	<input type="checkbox"/> Access Control Review
<input type="checkbox"/> OPA Plan Review	<input type="checkbox"/> Evacuation
<input type="checkbox"/> Fire	<input type="checkbox"/> Other Security Incident (describe)
<input type="checkbox"/> Personal Injury/Rescue	<input type="checkbox"/> Other (describe)

## DRILL PLANNING WORKSHEET (Continued)

### SMT-TTX/TST-TTX Drill Objectives:

- ☐ Demonstrate knowledge and use of the response plan(s).
  - ☐ Test the response teams ability to communicate and make decisions in managing a spill and/or security response.
  - ☐ Demonstrate the ability to mobilize security and response personnel. Complete all required notifications.
  - ☐ Secure facility/source of discharge.
  - ☐ Assess amount of damage/discharge.
  - ☐ Containment of spilled product.
  - ☐ Develop a recovery plan (including disposition of recovered product)
  - ☐ Demonstrate knowledge of sensitive areas and action steps to protect these areas. Set up and utilize adequate communications system.
  - ☐ Contact OSRO *within* 30 minutes (via phone) and verify current resource availability.
  - ☐ Demonstrate ability to coordinate and interface with contractor/agency personnel.
  - ☐ Demonstrate proper documentation practices
  - ☐ Exercise Worst Case Discharge (this MUST be done at least once every 3 years)
- Other: \_\_\_\_\_

### Equipment Deployment Drill Objectives:

Deploy equipment to:

- ☐ Contain spill
- ☐ Protect sensitive areas
- ☐ Recover product
- ☐ Manage waste

Drill Prepared by: \_\_\_\_\_  
(Name)

Drill Certified by: \_\_\_\_\_  
(Certifying Signature)

## Lessons Learned Evaluation Changes to be Implemented

(For security drills this form is labeled FSP-5□)

Type of Drill:

This form should be completed for each facility exercise (excluding QI/FSO notification) and filed as part of documentation package. Use as many sheets as necessary.

**IMPORTANT: Retain in OPA/ESP DRILL FILE (for 5 years)**

[illegible]

**NOTE:** This form contains general commentary regarding observations made during the exercise. "Action Items" (i.e., issues to be addressed are indicated with ***bold italic*** type. "Action items" have assigned responsibility indicated. General comment issues have no responsibility or timing assigned.

This form should be completed for each facility exercise (excluding quarterly QI/FSO notifications) and filed as part of the documentation package. Use as many sheets as necessary.

**Evaluator Signature:**

## APPENDIX J

## DEFINITIONS

Adverse Weather - The weather conditions that will be considered when identifying response systems and equipment in a response plan for the applicable operating environment. Factors to consider include significant wave height, ice, temperature, weather-related visibility, and currents within the Captain of the Port (COTP) zone in which the systems or equipment are intended to function.

Alteration - Any work on a tank or related equipment involving cutting, burning, welding, or heating operations that changes the physical dimensions or configuration of a tank.

Average Most Probable Discharge (AMPD) - 2100 gallon spill or 1% of the Worst Case Discharge.

Booming Strategies - Designated areas near the spill site accessible for gathering and deploying equipment and/or personnel. Strategic techniques which identify the location and quantity of boom required to protect certain areas. These techniques are generated by identifying a potential spill source and assuming certain conditions which would affect spill movement on water.

Captain of the Port Zone (COTP) - A zone specified in 33 CFR Part 3 and the seaward extension of that zone to the outer boundary of the Exclusive Economic Zone (EEZ).

Clean-Up - Clean-up refers to the removal and/or treatment of oil, hazardous substances, and/or the waste or contaminated materials generated by the incident. Clean-up includes restoration of the site and its natural resources.

Coastal Waters - All tidally influenced waters extending from the head of tide seaward to the three marine league limit of state jurisdiction; and non-tidally influenced waters extending from the head of tide in the arms inland to the point at which navigation by regulated vessels is naturally or artificially obstructed.

Complex - A facility possessing a combination of transportation-related and non-transportation-related components that is subject to the jurisdiction of more than one Federal agency under section 311(j) of the CWA.

Contingency Plan - (1) A document used by federal, state, and local agencies to guide their planning and response procedures regarding spills of oil, hazardous substances, or other emergencies; (2) a document used by industry as a response plan to spills of oil, hazardous substances, or other emergencies occurring upon their vessels or at their facilities.

### Contracts or Other Approved Means -

- (1) A written contractual agreement with a response contractor. The agreement should identify and ensure the availability of the specified personnel and equipment within stipulated response times in the specified geographic areas;
- (2) Written certification by the facility owner or operator that the specified personnel and equipment are owned, operated, or under the direct control of the facility owner or operator, and are available to respond to a discharge within stipulated times in the specified geographic areas;
- (3) Active membership in a local or regional oil spill removal organization that has identified specified personnel and equipment that are available to respond to a discharge within stipulated times in the specified geographic areas; or

## DEFINITIONS

### Contracts or Other Approved Means -

(4) A document which:

- (i) Identifies the personnel, equipment and services capable of being provided by the response contractor within stipulated response times in specified geographic areas;
- (ii) Sets out the parties' acknowledgment that the response contractor intends to commit the resources in the event of a response;
- (iii) Permits the Coast Guard to verify the availability of the response resources identified through tests, inspections, and drills; and
- (iv) Is incorporated by reference in the response plan; or

(5) Other specific arrangements approved by the EPA Regional Administrator upon request of the owner or operator. (EPA regulated facilities only)

Damage Assessment - The process of determining and measuring damages and injury to the human environment and natural resources, including cultural resources. Damages include differences between the conditions and use of natural resources and the human environment that would have occurred without the incident and the conditions and use that ensued following the incident. Damage assessment includes planning for restoration and determining the costs of restoration.

Decontamination - The removal of hazardous substances from personnel and their equipment necessary to prevent adverse health effects.

Discharge (Spill) - Any spilling, leaking, pumping, pouring, emitting, emptying, or dumping.

Dispersants - Those chemical agents that emulsify, disperse, or solubilize oil into the water column or promote the surface spreading of oil slicks to facilitate dispersal of the oil into the water column.

Diversion Boom - A floatation/freeboard device, made with a skirt/curtain, longitudinal strength member, and ballast unit/weight designed to deflect or divert the product towards a pick up point or away from certain areas,

Emergency Services - Those activities provided by state and local government to prepare for and carry out any activity to prevent, minimize, respond to, or recover from an emergency,

Environmentally Sensitive Areas - Streams and water bodies, aquifer recharge zones, springs, wetlands, agricultural areas, bird rookeries, endangered or threatened species (flora and fauna) habitat, wildlife preserves or conservation areas, parks, beaches, dunes, or any other area protected or managed for its natural resource value.

Facility - Any pipeline, structure, equipment, or device used for handling product, including, but not limited to, underground and aboveground tanks, impoundments, mobile or portable drilling or workover rigs, barge mounted drilling or workover rigs, and portable fueling facilities located offshore or on or adjacent to coastal waters or any place where a spill of oil from the facility could enter coastal waters or threaten to enter coastal waters.

Facility Causing Significant and Substantial Harm - Any fixed marine transportation related (MTR) onshore facility (including piping and any structures that are used for the transfer of oil between a vessel and a facility) that is capable of transferring oil in bulk, to or from a vessel of 250 barrels or more, or a deepwater port. This also includes any facility specifically identified by the COTP.



## DEFINITIONS

First Responders/First Response Agency - A public health or safety agency (e.g., fire service or police department) charged with responding to a spill during the emergency phase and alleviating immediate danger to human life, health, safety, or property.

Handle - To transfer, transport, pump, treat, process, store, dispose of, drill for, or produce.

Harmful Quantity of Oil - The presence of oil from an unauthorized spill in a quantity sufficient either to create a visible film or sheen upon or discoloration of the surface of the water or a shoreline, tidal flat, beach, or marsh, or to cause a sludge or emulsion to be deposited beneath the surface of the water or on a shoreline, tidal flat, beach, or marsh.

Hazardous Material - Any non-radioactive solid, liquid, or gaseous substance which, when uncontrolled, may be harmful to humans, animals, or the environment, including but not limited to substances otherwise defined as hazardous wastes, dangerous wastes, extremely hazardous wastes, oil, or pollutants.

Hazardous Substance - Any substance designed as such by the Administrator of the EPA pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act, regulated pursuant to Section 311 of the Federal Water Pollution Control Act, or spilled by the TWC.

Hazardous Waste - Any solid waste identified or listed as a hazardous waste by the Administrator of the EPA pursuant to the federal Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA), 42 U.S.C., Section 6901, et seq as amended. The EPA Administrator has identified the characteristics of hazardous wastes and listed certain wastes as hazardous in Title 40 of the Code of Federal Regulations, Part 261, Subparts C and D respectively.

Higher Volume Port Area -

- Boston, MA
- New York, NY
- Delaware Bay and River to Philadelphia, PA
- St. Croix, VI
- Pascagoula, MS
- Mississippi River from Southwest Pass, LA. to Baton Rouge, LA
- Louisiana Offshore Oil Port (LOOP), LA
- Lake Charles, LA
- Sabine-Neches River, TX
- Galveston Bay and Houston Ship Channel, TX
- Corpus Christi, TX
- Los Angeles/Long Beach Harbor, CA
- San Francisco Bay, San Pablo Bay, Carquinez Strait, and Suisun Bay to Antioch, CA
- Straits of Juan De Fuca and Puget Sound, WA
- Prince William Sound, AK

Immediate Response Steps - The immediate steps that are to be taken by the spill observer after detection of a spill.

Incident - Any event that results in a spill or release of oil or hazardous materials. Action by emergency service personnel may be required to prevent or minimize loss of life or damage to property and/or natural resources.

## DEFINITIONS

Incident Commander - The one individual in charge at any given time of an incident. The incident Commander will be responsible for establishing a unified command with all on-scene coordinators.

Incident Command System - A method by which the response to an extraordinary event, including a spill, is categorized into functional components and responsibility for each component assigned to the appropriate individual or agency.

Initial Clean-Up - Remedial action at a site to eliminate acute hazards associated with a spill. An initial clean-up action is implemented at a site when a spill of material is an actual or potentially imminent threat to public health or the environment, or difficulty of cleanup increases significantly without timely remedial action. All sites must be evaluated to determine whether initial cleanup is total cleanup; however, this will not be possible in all cases due to site conditions (i.e., a site where overland transport or flooding may occur).

Inland Area - The area shoreward of the boundary lines defined in 46 CFR Part 7, except in the Gulf of Mexico. In the Gulf of Mexico, it means the area shoreward of the lines of demarcation (COLREG lines) defined in 80.740 - 80.850 of Title 33 of the CFR. The inland area does not include the Great Lakes,

Lower Explosive Limit (LEL) - Air measurement utilized to determine the lowest concentration of vapors that support combustion. This measurement must be made prior to entry into a spill area.

Marine Facility - Any facility used for tank vessel wharfage or anchorage, including any equipment used for the purpose of handling or transferring oil in bulk to or from a tank vessel.

Marine Transportation-Related Facility (MTR Facility) - An onshore facility, including piping and any structure used to transfer oil to or from a vessel, subject to regulations under 33 CFR Part 154 and any deepwater port subject to regulations under 33 CFR part 150.

Maximum Extent Practicable - The limitations used to determine oil spill planning resources and response times for on-water recovery, shoreline protection, and cleanup for worst case discharges in adverse weather. The appropriate limitations for such planning are available technology and the practical and technical limits on an individual facility owner or operator.

Maximum Most Probable Discharge (MMPD) - A discharge of the lesser of 1,200 barrels or 10 percent of the volume of a worst case discharge.

National Contingency Plan - The plan prepared under the Federal Water Pollution Control Act (33 United State Code SS1321 et seq) and the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 United State Code SS9601 et seq), as revised from time to time.

Natural Resource - Land, fish, wildlife, biota, air, water, ground water, drinking water supplies, and other such resources belonging to, managed by, held in trust by, appertaining to or otherwise controlled by the state or federal government, private parties, or a municipality.

Nearshore Area - The area extending seaward 12 miles from the boundary lines defined in 46 CFR part 7, except in the Gulf of Mexico. In the Gulf of Mexico, it means the area extending seaward 12 miles from the line of demarcation (COLREG lines) defined in 80.740 - 80.850 of Title 33 of the CFR.

Non-Persistent or Group I Oil - A petroleum-based oil that, at the time of shipment, consists of hydrocarbon fractions:

- (1) At least 50% of which by volume distill at a temperature of 340° C (645° F); and
- (2) At least 95% of which by volume distill at a temperature of 370° C (700° F).

## DEFINITIONS

Non-Petroleum Oil - Oil of any kind that is not petroleum-based. It includes, but is not limited to, animal and vegetable oils.

Oil or Oils - Naturally occurring liquid hydrocarbons at atmospheric temperature and pressure coming from the earth, including condensate and natural gasoline, and any fractionation thereof, including, but not limited to, crude oil, petroleum gasoline, fuel oil, diesel oil, oil sludge, oil refuse, and oil mixed with wastes other than dredged spoil. Oil does not include any substance listed in Table 302.4 of 40 CFR Part 302 adopted August 14, 1989, under Section 101(14) of the Federal Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended by P.L. 99499.

Oil Spill Removal Organization - An entity that provides response resources.

Oily Waste - Product contaminated waste resulting from a spill or spill response operations.

Operating Area - The rivers and canals, inland, nearshore, Great Lakes, or offshore geographic location(s) in which a facility is handling, storing, or transporting oil.

Operating Environment - Rivers and canals, inland, Great Lakes, or ocean. These terms are used to define the conditions in which response equipment is designed to function.

Owner or Operator - Any person, individual, partnership, corporation, association, governmental unit, or public or private organization of any character.

Persistent Oil - A petroleum-based oil that does not meet the distillation criteria for a non-persistent oil. For the purposes of this Plan, persistent oils are further classified based on specific gravity as follows:

- (1) Group II - specific gravity less than .85.
- (2) Group III - specific gravity between .84 and less than .95.
- (3) Group IV - specific gravity .95 to and including 1.0.
- (4) Group V - specific gravity greater than 1.0.

Plan - Spill response, clean-up, and disposal contingency plan.

Post-Emergency Response - The portion of a response performed after the immediate threat of a release has been stabilized or eliminated and cleanup of the sites has begun.

Primary Response Contractor(s) - An individual, company, or cooperative that has contracted directly with the plan holder to provide equipment and/or personnel for the containment or cleanup of spilled oil.

Qualified Individual(s) - An English-speaking representative(s) of the facility identified in the plan, located in the United States, available on a 24-hour basis, able to arrive at the facility in a reasonable time, familiar with implementation of the facility response plan, and trained the responsibilities of the Qualified Individual under the response plan. This person must have a document from the owner or operator designating them as a Qualified Individual and specifying their full authority to:

- (1) Activate and engage in contracting with oil spill removal organization(s);
- (2) Act as a liaison with the pre-designated Federal On-Scene Coordinator (OSC); and
- (3) Obligate funds required to carry out all necessary or directed response activities.

## DEFINITIONS

Recreation Areas - Publicly accessible locations where social/sporting events take place.

Regional Response Team - The federal response organization (consisting of representatives from selected federal and state agencies) which acts as a regional body responsible for planning and preparedness before an oil spill occurs and providing advice to the FOSC in the event of a major or substantial spill.

Repair - Any work necessary to maintain or restore a tank or related equipment to a condition suitable for safe operation.

Response Activities - The containment and removal of oil from the water and shorelines, the temporary storage and disposal of recovered oil, or the taking of other actions as necessary to minimize or mitigate damage to the environment.

Response Contractors - Persons/companies contracted to undertake a response action to contain and/or clean up a spill.

Response Guidelines - Guidelines for initial response that are based on the type of product involved in the spill, these guidelines are utilized to determine clean-up methods and equipment.

Response Plan - A practical plan used by industry for responding to a spill. Its features include: (1) identifying the notification sequence, responsibilities, response techniques, etc. in an easy to use format; (2) using decision trees, flowcharts, and checklists to insure the proper response for spills with varying characteristics; and (3) segregating information needed during the response from that required by regulatory agencies to prevent confusion during a spill incident.

Response Resources - The personnel, equipment, supplies, and other capability necessary to perform the response activities identified in a response plan.

Responsible Party - Any person, owner/operator, or facility that has control over an oil or hazardous substance immediately before entry of the oil or hazardous substance into the atmosphere or in or upon the water, surface, or subsurface land of the state.

Restoration - The actions involved in returning a site to its former condition.

Rivers and Canals - Bodies of water confined within the inland area that has a project depth of 12 feet or less, including the Intracoastal Waterway and other waterways artificially created for navigation.

Securing the Source - Steps that must be taken to stop the spill of oil at the source of the spill.

Site Security and Control - Steps that must be taken to provide safeguards needed to protect personnel and property, as well as the general public, to ensure an efficient clean-up operation.

Site Conditions - Details of the area surrounding the facility, including shoreline descriptions, typical weather conditions, socioeconomic breakdowns, etc.

Skimmers - Mechanical devices used to skim the surface of the water and recover floating oil. Skimmers fall into four basic categories (suction heads, floating weirs, oleophilic surface units, and hydrodynamic devices) which vary in efficiency depending on the type of oil and size of spill.

## DEFINITIONS

Sorbent - Materials ranging from natural products to synthetic polymeric foams placed in confined areas to soak up small quantities of oil. Sorbents are very effective in protecting walkways, boat decks, working areas, and previously uncontaminated or cleaned areas.

Spill - An unauthorized spill of oil or hazardous substance into the waters of the state.

Spill Management Team - The personnel required to staff the organizational structure identified in a response plan to manage response plan implementation.

Spill Observer - The first Global individual who discovers a spill. This individual must function as the first responder and person-in-charge until relieved by an authorized supervisor.

Spill Response - All actions taken in responding to spills of oil and hazardous materials including: receiving and making notifications; information gathering and technical advisory phone calls; preparation for and travel to and from spill sites; direction of clean-up activities; damage assessments; report writing, enforcement investigations and actions; cost recovery; and program development.

Spill Response Personnel - Federal, state, and local agency, and industry personnel responsible for participating in or otherwise involved in spill response.

Substantial Threat of a Discharge - Any incident or condition involving a facility that may create a risk of discharge of fuel or cargo oil. Such incidents include, but are not limited to, storage tank or piping failures, above ground or underground leaks, fires, explosions, flooding, spills contained within the facility, or other similar occurrences.

Unauthorized Spill - Spills excluding those authorized by and in compliance with a government permit, seepage from the earth solely from natural causes, and unavoidable, minute spills of oil from a properly functioning engine, of a harmful quantity of oil from a vessel or facility either: (1) into coastal waters; or (2) on any waters or land adjacent to coastal waters where harmful quantity of oil may enter coastal waters or threaten to enter coastal waters if the spill is not abated nor contained and the oil is not removed.

Unified Command - The method by which local, state, and federal agencies and the responsible party will work with the Incident Commander to:

- Determine their roles and responsibilities for a given incident,
- Determine their overall objectives for management of an incident
- Select a strategy to achieve agreed upon objectives.
- Deploy resources to achieve agreed-upon objectives.

Waste - Oil or contaminated soil, debris, and other substances removed from coastal waters and adjacent waters, shorelines, estuaries, tidal flats, beaches, or marshes in response to an unauthorized spill. Waste means any solid, liquid, or other material intended to be disposed of or discarded and generated as a result of an unauthorized spill of oil. Waste does not include substances intended to be recycled if they are in fact recycled within 90 days of their generation or if they are brought to a recycling facility within that time.

Wildlife Rescue - Efforts made in conjunction with federal and state agencies to retrieve, clean, and rehabilitate birds and wildlife affected by an oil spill.

## DEFINITIONS

Worst Case Unauthorized Discharge - The largest foreseeable unauthorized spill under adverse weather conditions. For facilities located above the high water line of coastal waters, a worst case spill includes those weather conditions most likely to cause oil spilled from the facility to enter coastal waters.

Worst Case Discharge (EPA) -

- (1) Loss of the entire capacity of all above ground tank(s) at the facility not having secondary containment; plus
- (2) 100% of the capacity of the largest tank within a secondary containment system or 100% of the combined capacity of the largest group of above ground tanks permanently manifolded together within the same secondary containment system - whichever is greater. (110% of capacity if facility is located adjacent to navigable waters).

Worst Case Discharge (USCG) -

- (1) The loss of the entire capacity of all in-line and breakout storage tanks needed for the continuous operation of the pipelines used for the purpose of handling or transporting oil, in bulk, to or from a vessel regardless of the presence of secondary containment; plus
- (2) The discharge from all piping carrying oil between the marine transfer manifold and the nontransportation-related portion of the facility.

## ACRONYMS

ACP	Area Contingency Plan
AMPD	Average Most Probable Discharge
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980
CFR	Code of Federal Regulations
CHRIS	Chemical Hazards Response Information System
COTP	Captain of the Port
CWA	Clean Water Act
DOT	Department of Transportation
ELIRT	Emergency Local Interfunctional Response Team (Exxon)
EPA	Environmental Protection Agency
ERAP	Emergency Response Action Plan
ERG	Emergency Response Coordinator
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FOSC	Federal On-Scene Coordinator
HAZMAT	Hazardous Materials
IC	Incident Commander
ICS	Incident Command System
LEL	Lower Explosive Limit
LEPC	Local Emergency Planning Committee
MMPD	Maximum Most Probable Discharge
MSDS	Material Safety Data Sheet
MSRC	Marine Spill Response Corporation
NARRT	North America Regional Response Team (NARRT) (ExxonMobil Tier 3 Team)
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NIOSH	National Institute for Occupational Safety and Health
NOAA	National Oceanic and Atmospheric Administration
NRC	National Response Center
NRT	National Response Team
OPA	Oil Pollution Act of 1990
OSC	On-Scene Coordinator
OSHA	Occupational Safety and Health Act
OSRL	Oil Spill Response, Ltd.
OSRP	Oil Spill Response Plan
PFD	Personal Flotation Device
PPE	Personal Protective Equipment
QI	Qualified Individual
RA	EPA Regional Administrator
RCRA	Resource Conservation and Recovery Act
RRT	Regional Response Team
SARA	Superfund Amendments and Reauthorization Act
SCBA	Self-Contained Breathing Apparatus
SDWA	Safe Drinking Water Act of 1986
SERC	State Emergency Response Commission
SI	Surface Impoundment
SIC	Standard Industry Codes
SPCC	Spill Prevention, Control and Countermeasures Plan
STRCC	Spill Team Response Containment/Cleanup

## ACRONYMS

TARC	Tiered Area Response Consortium
USCG	United States Coast Guard
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
USHHS	U.S. Department of Health & Human Services
WCD	Worst Case Discharge



## APPENDIX K

## **SPCC PLAN**

The original certified SPCC Plan for this facility is maintained at the terminal at the facility address shown in Section 1.0 of the ERAP

## APPENDIX L

## **USCG / EPA FRP REGULATIONS**

Copies of the appropriate regulations for this facility are available on the internet.